<u>**Finance and Economics Working Group Matrix**</u>

Highlighted cells indicate U.S. Action

Agenda Item	US Member	US ABAC position/action	USG Position if known	Other economy positions
1. From the Chair				
A) FEWG Work Plan	**Kevin Thieneman**	• ABAC USA should monitor		
2. Data Flows	**Kevin Thieneman**	• **Kevin will present the data flows**		
3. Update on SOM meeting in Kazan	**Kevin Thieneman**	• ABAC USA should monitor.		
4. Update of G20	**Kevin Thieneman**	• ABAC USA should monitor.		•
5. Financial Markets Stability	**Kevin Thieneman**	• ABAC USA Should monitor		ABAC Russia
6. Regional Financial Architecture	**Kevin Thieneman**	• Report from workshop • ABAC USA Should monitor		
7. Pension and Health Insurance Funds	**Kevin Thieneman**	• ABAC USA Should monitor		**ABAC PNG**
8. Government role in supporting SMMEs	**Kevin Thieneman**	• ABAC USA should monitor.		•
9. Regional Credit Rating System	**Kevin Thieneman**	• ABAC USA supports <u>**reasonable**</u> regulatory oversight in the CRA industry. CRAs have made progress in improving the quality of their ratings as well as transparency. Regarding the development of local or regional CRAs, ABAC USA is supportive of pro-market solutions to these problems.		
10. ABAC Dialogue with Finance Ministers	**Kevin Thieneman**	• ABAC USA should monitor		
11. Unintended consequence of financial regulations	**Kevin Thieneman**	• Letter calls for economies to collaborate with each other in taking due account of the cross-border and extraterritorial effects of financial regulations • ABAC USA is supportive of utilizing ABAC and APEC as a forum to coordinate policy development		ABAC Japan
12. IFRS – Revenue Recognition	**Kevin Thieneman**	• Kevin should note US support for the workshop on IFRS on the margins of the Economic Committee at SOM II. • ABAC USA has identified 2 speakers that will be	USG is supportive	ABAC Japan, ABAC Chinese Taipei, and ABAC NZ are supportive

		participating in dialogue •		
13. Internationalization of emerging economies currencies	Kevin Thieneman	• ABAC Japan will be developing a work plan for ABAC III		ABAC Japan
14. Volcker Rule	**Kevin Thieneman**	• While ABAC USA does not endorse the practice of raising specific legislation from APEC economies as part of ABAC's discussions, we are in favor of supporting ABAC projects that advance free and open markets and competition as the way to better integrate the regional APEC economy. • We recognize the need for appropriate regulatory regimes to govern elements of capital and financial markets. There is no broad consensus we are aware of internationally to enshrine capital controls as a fixed element of international trade and investment policy. • However, we would be pleased to engage in a discussion with China ABAC to explore changes to the proposals to address our shared interests in seeing well-functioning capital flow markets in the APEC region.		
15. RMB Settlement for Cross Border Trade	**Kevin Thieneman**	• As this "for information" paper largely focuses on promoting the RMB and does not include any recommendations that would be included in the report to leaders/finance ministers, there is no immediate action required by ABAC USA. • ABAC USA will closely monitor the presentation to ensure that no recommendations are included.		
16. Impact of U.S. FATCA	**Kevin Thieneman**	• ABAC is not an appropriate forum to raise issues with specific legislation from any APEC economy. • ABAC USA is supportive of utilizing ABAC and APEC as a forum to coordinate policy development, however it is beyond the scope and authority of ABAC to request that Members report on the impact of a specific legislation from a specific economy.		

Document: FEWG 32-012 Draft: **THIRD** Source: FEWG Chair Date: 8 May 2012 Meeting: Kuala Lumpur, Malaysia

Draft
Finance and Economic Working Group
1615 - 1815, Tuesday 22nd May 2012
Shangri La Hotel Kuala Lumpur

Agenda

Agenda Item No.	Issue	Lead Economy/ Speaker	Doc. No.
1	**Introduction** − Opening Remarks − Review of ABAC Russia priorities − Approval of the minutes of the last FEWG meeting	**Mr John Denton**	
2	**Matters Arising** − Data flows – review of proposed draft letter to Communications Ministers	**ABAC USA**	
3	**Update on the SOM Meeting in Kazan**	**TBC**	
4	**Update of G20 and implications for APEC business environment**	**IMF/ ABAC Australia**	FEWG 32-017 FEWG 32-018
5	**Financial Markets Stability –** Paper 2	**ABAC Russia**	FEWG 32-019
6	**Regional Financial Architecture –** update on progress and the Forum held in Melbourne 13 March 2012	**Advisory Group**	FEWG 32-014
7	**Inclusive Finance –** The Role of Pension and Health Insurance Funds	**ABAC Papua New Guinea**	FEWG 32-013
8	**Inclusive Finance –** The Government's role in supporting SMME's	**ABAC Malaysia**	
9	**Financial Markets Stability -** Regional Credit Rating System	**ABAC China**	FEWG 32-020
10	**ABAC Dialogue with Finance Ministers Moscow** **-** ABAC Paper on Tentative proposed deliverables in finance for submission to Russian Ministry of finance	**ABAC Japan**	
11	**Letter on unintended consequence of financial regulations to relevant authorities.**	**ABAC Japan**	FEWG 32-016

12	**Revenue Recognition in IFRS Implementation**	**ABAC Japan**	
13	**Internationalization of emerging economies currencies**	**Mr Akira Nakamura, Institute for International Monetary Affairs** **ABAC Japan** **ABAC China** **ABAC Russia**	
14	**Volcker Rule Draft in the United States and Suggestions on the Financial Regulatory Reform in the Asia-Pacific region**	**ABAC China**	FEWG 32-021
15	**Status Quo, Challenges and Future Direction of RMB Settlement for Cross-Border Trade**	**ABAC China**	FEWG 32-022
16	**The Influence of U.S. FATCA and the Recommendations**	**ABAC China**	FEWG 32-023
	Other Issues - Other Business Closing Remarks Closing Remarks		FEWG 32-015

Document: FEWG 32-011 Draft: **FIRST** Source: FEWG Chair Date: 23 February 2012 Meeting: Hong Kong, China

Finance and Economics Working Group Meeting
23 February 2012, Hong Kong, China

Minutes of the Meeting

1. Finance and Economics Working Group (FEWG) Chair John Denton welcomed delegates and guests and thanked the Co-Chairs for their support. He reviewed the 2012 priorities presented earlier by ABAC Russia and presented the minutes of the last FEWG meeting, which was approved by the Working Group.

2. FEWG Draft Work Program for 2012

<table>
<tr><td>What was the issue?
Establishment of the work program and issues for discussion for FEWG during 2012</td></tr>
<tr><td>What was discussed?
The proposed work program includes three priorities.

1. Strengthening the stability of financial markets and integration of financial markets to support trade, in particular through
a. Enhancing the facilitation of cross-border data flows for the financial services industry.
b. Enhancing financial market information and risk reduction through improvement of regional credit information and the legal frameworks for collateral registration.
c. Identification of common areas across APEC economies where regulatory and structural reforms can be undertaken and institutions developed to enable greater convergence and integration of financial markets and systems.
2. Promoting practical solutions to support the importance of inclusiveness and access to finance for SMMEs, through
a. Promoting the restoration of health and retirement incomes back to APEC's agenda as an integral component of social inclusion.
b. Continuing the development of economic growth through capacity building and sharing of best practices in relation to SMME finance.
3. Advising APEC Leaders and Finance Ministers on the implications for the Asia-Pacific region, as seen by business, on G20 recommendations on financial system reform, particularly through monitoring of G20 developments in the context of regional economic integration.</td></tr>
<tr><td>What was agreed/decided?
FEWG endorsed the work program.</td></tr>
</table>

3. Update on the APEC Finance Deputies' and Deputy Central Bank Governors' Meeting in Yaroslavl, Russian Federation, 16-17 February 2012

What was the issue?

Update on the APEC Finance Deputies' and Deputy Central Bank Governors' Meeting in Yaroslavl, Russian Federation, 16-17 February 2012

What was discussed?

Dr. J.C. Parrenas of ABAC Japan made a report on the meeting, as follows:

1. In the Session on Global Outlook and Perspectives, there were presentations from the IMF, the World Bank, the US Treasury and the Chinese Finance Ministry. The main message from the discussions was that the global economy is decelerating and faces threats from three fronts - a euro crisis, a tightening of bank lending in response to the need to build up capital, and financial and trade spillovers. Further contributing factors would be insufficient progress in the medium-term fiscal plans of the US and Japan, a hard landing in emerging markets and geopolitical risks to the oil supply. Four things are important to avoid the worst scenario: (a) Restore confidence by making balanced adjustments (i.e., not too fast, not too slow), containing the threat of bad deleveraging in the banking sector through further monetary easing and deepening financial and fiscal integration. (b) The US and Japan must implement credible medium-term consolidation plans. (c) Progress on financial repair and financial reform. (4) Emerging markets should stimulate domestic demand to rebalance the global recovery. In addition, serious structural reform should be pursued.

2. The second session focused on fiscal sustainability. The main message coming out of this session is that in APEC fiscal balances have significantly deteriorated. Some economies - Japan, US, Malaysia, Australia and New Zealand - need to make large primary balance adjustments. Historically, economies have demonstrated the ability to fiscally consolidate through economic growth, today they face additional challenges from aging populations and increases in pension and health care spending, so that larger adjustments will be needed this time. Empirical research has shown that moderate debt and limited budget deficits are good for growth, but excessive debts and large budget deficits hamper growth and threaten financial stability. There was also a discussion on what is a safe level of debt to avoid insolvency, and although there is no one size that fits all, there were some broad guidelines proposed by the World Bank, which is about 180-190% of GDP for developed economies and 63-78% for emerging markets. Australia, New Zealand and Singapore shared their experiences in ensuring fiscal sustainability through legal measures. Australia talked about their strategy for fiscal responsibility, initiated in 1996, including the enactment of the Charter of Budget Honesty. New Zealand talked about the Fiscal Sustainability Act of 1994, and Singapore talked about the balanced budget policy based on constitutional provisions. All three economies noted the positive impact of enshrining fiscal responsibility in legal measures.

3. The third session dealt with the development of treasury systems, which is a key issue in promoting fiscal sustainability. The focus was on improving government operations, fiscal transparency and integrity of the use of budget funds through integration and automation of financial management information systems in treasuries or finance ministries. An important conclusion was that it is necessary to have good conceptual design before starting a system, because it involves a huge investment that is difficult and costly to change after it has been established.

Further discussions will be undertaken in a workshop on the modernization of treasury systems which will be hosted by the Treasury of the Russian Federation in Kazan on March 25-27.

4. The fourth session focused on financial literacy. There were presentations from the US, Canada and Australia on their experiences and overview presentations from the World Bank and the OECD. The results of ABAC's 2011 Financial Inclusion Forum, which was held in Tokyo last September, were presented, highlighting the discussions on financial literacy, and also made a presentation on our 2012 Forum, which will be held on June 25-27 in Shanghai. Participants welcomed this initiative. Russia plans to undertake a workshop of experts on financial literacy in the second quarter, followed by a conference of finance officials, which will identify issues that will be included for consideration by finance ministers. Details are supposed to be communicated later.

5. The fifth session focused on financial policy measures to address the impact of natural disasters, which is an issue that the finance ministries hope to develop further during the course of the year. The objective of this work is to develop a toolkit and identify components to help financial authorities prepare for natural disasters. The backdrop to this project is the growing impact of natural disasters on economies. As an IMF study shows, since the 1980s, the occurrence of natural disasters has doubled, especially in the case of floods and storms, and the damages and losses arising from such disasters have significantly increased, particularly in view of population growth and urbanization. Japan, Mexico, China, Thailand and Chile shared their experiences in coping with recent natural disasters, while the IMF and OECD provided overviews. The major takeaway from the discussions is that disaster recovery needs secure, stable and rapidly deployable resources for risk identification, risk reduction, financial protection, preparedness and post-disaster reconstruction. There is also a clear public sector role in insurance coverage of catastrophic losses, which can range from being a primary insurer, a reinsurer of last resort, a backstop liquidity provider or a guarantor for special purpose vehicles, pools or funds. A special workshop will also be undertaken by Russia on this subject. Dates and venue will be announced.

6. Finally in the last session, the participants reviewed the initiatives under the Finance Ministers' Process. ABAC's work on infrastructure, venture capital finance and regional financial markets integration, were presented, which participants welcomed.

What was agreed/decided?

The report was noted by the Working Group.

4. Cross-border data flows

What was the issue?

Promoting cross-border data flows to strengthen APEC's regional financial architecture

What was discussed?

Mr. Kevin Thienemann of ABAC USA presented the paper, which posited that international trade depends on seamless and uninterrupted data flows across companies, jurisdictions and borders. However, financial services firms are frequently confronted with non-tariff barriers in the form of regulatory restrictions, lack of regulatory coherence, and poor transparency in the development, implementation and application of regulations. These barriers can prevent access in much the same way as tariffs, but unlike tariffs, no quantitative mechanism exists to reduce them.

Sustained economic growth in the APEC region is heavily dependent on a transparent legal, policy and regulatory environment that facilitate the flow of data across borders for the conduct of trade and commerce. A trade-friendly environment should (a) enhance regulatory cooperation and avoid restrictions on legitimate cross-border information flows in the financial services industry; (b) actively address impediments to the free flow of information that unnecessarily impede cross-border trade or impose an unreasonable burden on the business community; (c) promote international standards, dialogues and best practices; and (d) support the application of transparent and non-discriminatory policy.

It was proposed that: (a) ABAC draft a letter to the APEC Telecommunications Ministers, who will meet on 6-8 August in St. Petersburg. The letter will express support for the free flow of data incorporating the four recommendations mentioned above as well as other recommendations that will be identified during the ABAC year. (b) ABAC will identify an opportunity for a public-private workshop on data flows to be coordinated on the margins of the TEL Ministerial, and draft a letter intersessionally between ABAC I and ABAC II to the TELWG expressing support for a public-private workshop. (c) Recommendations on data flows will be incorporated in the 2012 ABAC Report to Finance Ministers that will be finalized in ABAC III.

The importance of developing clear terms of reference was emphasized to aid in securing support of telecommunications ministers.

What was agreed/decided?
The proposals were endorsed by FEWG.

5. Update of G20 Meeting

What was the issue?
Report to ABAC on the G20

What was discussed?
Mr. R. Sean Craig of the IMF presented a report to FEWG on the 2012 agenda of the G20, which includes the following elements: (a) economic stabilization and structural reforms as foundations for growth and employment; (b) strengthening the financial system and fostering financial inclusion to promote economic growth; (c) improving the international financial architecture in an interconnected world; (d) enhancing food security and addressing commodity price volatility; and (e) promoting sustainable development, green growth and the fight against climate change.

Mr. Craig also made reference to the current economic situation, where the global economy finds itself in a fragile recovery phase and facing challenges of maintaining confidence in policies being undertaken to address issues in the global financial system. He also discussed the importance of adequate firewalls to deal with spillovers, strengthening systemically important financial institutions and dealing with the macroeconomic impacts of Basel III. He noted that financial inclusion is a major concern of the G20, and that the G20 finance ministers and central bank governors are keen to create a framework and financial infrastructure to promote financial inclusion.

Responding to a question from Mr. Wayne Golding of ABAC PNG about firewalls, Mr. Craig clarified that this involves facilities to manage crises arising from shocks in other markets, and that the use of firewalls and central bank resources to contain crises need to be closely coordinated.

Mr. Mark Johnson of ABAC Australia mentioned that while regulatory reforms are currently focused on fixing problems in developed markets in the US and Europe, it is important to ensure that global standards and financial regulation be designed to also be applicable to fragmented and yet underdeveloped Asian markets, particularly in promoting their development. Mr. Anthony Nightingale of ABAC Hong Kong noted the importance of resisting solutions that are specifically designed to address political pressures in certain economies.

What was agreed/decided?
The Working Group noted the report and comments.

6. APEC IFRS Roundtable and related issues

What was the issue?
IFRS Roundtable at SOM2/EC2 in Kazan

What was discussed?
Mr. Yoshihiro Watanabe of ABAC Japan reminded the Working Group about ABAC's observation in its 2010 Report to Economic Leaders that it believes the introduction of robust common accounting standards has the potential to enhance development of capital markets in the region, as well as to promote sustainable economic growth. However, many private sector organizations have concerns about the implementation of IFRS. In 2011, ABAC recommended to establish a task force to discuss studies on the smooth introduction of IFRS to ensure appropriate coordination among IASB, FASB, APEC and ABAC. In accordance with this recommendation, APEC New Zealand and APEC Japan requested support and cooperation of ABAC in holding an IFRS Roundtable for wide-ranging discussions at SOM/EC in Russia.

ABAC Japan proposes that ABAC cooperate with APEC officials in organizing an IFRS Roundtable at the next SOM/EC in Kazan to promote appropriate communication among relevant stakeholders, and to discuss the following in order to realize the Roundtable: (a) concept of the roundtable; (b) contents of the roundtable; (c) participants; (d) goal or exit of roundtable; and (e) next steps.

What was agreed/decided?
FEWG agreed to endorse the proposal.

7. Regional financial architecture

What was the issue?
Holding of a forum in Melbourne on 13 March on the Asia-Pacific Financial Markets Integration

Project
What was discussed? Mr. Mark Johnson of ABAC Australia informed the Working Group that the Advisory Group is convening a Forum in Melbourne on the Asia-Pacific Financial Markets Integration Project on 13 March. The forum will seek to discuss solutions to the lack of connectivity of the region's financial markets, and to develop a series of priorities for regional financial integration on issues ranging from financial stability to clearing and settlement systems. Mr. Ken Waller of the Australian APEC Study Centre at RMIT University informed participants that the Fung Global Institute will be also invited to participate in the Forum.
What was agreed/decided? FEWG endorsed the forum in Melbourne.

8. Financial Markets Stability

What was the issue? Financial stability in the APEC region, focusing on dimensions, background and key issues
What was discussed? Mr. Neil McKinnon of VTB Capital Research presented a paper "Financial Stability: Dimensions, Background and Key Issues." The paper dealt with the wake of the 2007-08 financial crisis, in which financial stability came to the forefront of the economic policy agenda. The paper outlined the scope of the issue at hand, along with the state of the policy and academic debate on the matter. It discussed three principal themes: It breaks the topic down into three principal themes: (a) private sector leverage (which encompasses the interrelated issues of financial intermediation, corporate and household debt); (b) sovereign debt and the long-term sustainability of public finances; and (c) global imbalances, monetary policy and the stability of fiat currency systems. The FEWG Chair noted that the report is a useful background to the subject that will be further discussed at the next meeting, where the Working Group will explore ways to address the issues presented.
What was agreed/decided? FEWG noted the report.

9. Internationalization of Emerging Markets' Currencies

What was the issue? Internationalization of emerging economies' currencies and their increasing roles in the cross-border financial transactions
What was discussed? Mr. Yoshihiro Watanabe of ABAC Japan presented the issue, and noted that in accordance with the

rise of the emerging economies in the world, it could be natural to expect their currencies to play more important roles in the region/global markets, particularly for trade settlement and investment, and as anchor currencies to stabilize the regional financial markets/economies in case of the turmoil in the other regions. Given this, it was proposed that ABAC discuss the following points widely in order to explore how emerging economies currencies' could play larger roles: (a) overview of the current status; (b) outstanding challenges in the internationalization of the emerging economies currencies; (c) influence to the financial markets and the economies; (d) contribution to the global financial markets and the economies; and (e) action plan for promoting stability, including bilateral/multilateral/sub-regional cooperation.

Among possible recommendations that could be considered are the following: (a) APEC could consider the increasing roles of the emerging economies currencies for encouraging the trade and the investments in the region/global markets. (b) Monitoring the excess volatility and the stable capital flow in the region is required for the internationalization of the emerging economies currencies. (c) APEC could focus on the stability of the financial markets/economies in the region by promoting the emerging economies currencies, which are expected to play important roles as the anchor in case of the turmoil/crisis in the global financial markets and economies. (d) APEC could discuss and point out the methodologies to promote the usage of the emerging economies currencies in the region/global markets. (e) Further strengthening and expanding sub regional cooperation such as CMIM in the region could be considered in order to provide for the external shock and to minimize the negative impact.

Mr. Watanabe proposed that a presentation by the Institute for International Monetary Affairs on this subject be undertaken either in ABAC II or ABAC III this year as a basis for discussion of possible recommendations.

Mr. Francisco Garces of ABAC Chile endorsed the idea, noting that the internationalization of emerging market currencies has become important in view of the euro crisis and would stimulate trade and investment in the region. He also noted the importance of considering whether CMIM could be expanded to a broader set of APEC economies.

Madame Lili Wang of ABAC China also supported the proposal to discuss this matter, noting that ABAC China will communicate specific suggestions to ABAC Japan on the wording of any eventual recommendations.

What was agreed/decided?
FEWG agreed to the proposed presentation.

10. Unintended consequences of the implementation of new financial regulations

What was the issue?
Unintended consequences of the implementation of new financial regulations on financial markets, including the Volcker Rule and Basel III.

What was discussed?
Mr. Yoshihiro Watanabe of ABAC Japan noted that the implementation of new financial regulations

could have unintended consequences that may negatively affect financial markets, such as: (a) impediments to the development of the financial markets; (b) negative impact of regulations on liquidity in financial markets; and (c) distortion of financial markets. Accordingly, he proposed that ABAC discuss the following points more widely: (a) overview of financial regulations adoption and implementation; (b) outstanding challenges in their implementation; (c) influence on financial markets and economies; (d) government bond markets; (e) derivatives; (f) stability of financial markets and economies; and (g) possible action plans.

Among possible recommendations that could be considered are the following: (a) APEC could consider the implementation of financial regulations for encouraging sound financial markets/economies in the region and avoiding unintended consequences. (b) APEC could focus on the stability of the financial markets/economies in the region for sustainable development in conjunction with macroeconomic policy coordination, liberalization of trade and investment and growth strategies. (c) APEC could undertake a survey and discussion of the implementation of financial regulations.

Mr. Watanabe proposed that a letter to the appropriate authority be discussed, drafted and endorsed.

Madame Lili Wang agreed with the arguments presented, noting that global rules are already exerting unintended consequences not just on the banking and financial sectors of emerging markets, but on many other sectors as well, due to the fact that there are rules affecting dealings with counterparties and having extraterritorial impact. She noted the example of requirements for disclosure of customer information, which clash with existing regulations protecting the confidentiality of customer information in Asian economies. She stressed the importance of monitoring the development of rules and regulations from the private sector perspective.

What was agreed/decided?

FEWG agreed to discuss and draft a letter on these issues to the relevant authority.

11. Advisory Group on APEC Financial System Capacity Building

What was the issue?

Report of the Advisory Group's meeting

What was discussed?

Dr. J.C. Parrenas, Advisory Group Coordinator, presented the report on the Advisory Group meeting. The 2012 Work Program, which was approved by the Advisory Group, contained the following elements:

1. Financial Inclusion: The 2012 Asia-Pacific Financial Inclusion Forum: ABAC will convene with ADB Institute (ADBI) and the Asia-Pacific Finance and Development Center (AFDC) the 2012 Asia-Pacific Financial Inclusion Forum in Shanghai, People's Republic of China, on 25-27 June. The 2012 Forum intends to build on the conclusions of the 2011 Forum, which identified common basic elements of an enabling environment to promote financial inclusion - financial literacy, financial identity, proportionality of regulations and consumer protection. In addition, the Forum intends to take further initial discussions on linking microfinance to remittances, which has great growth potential in the context of ongoing

regional economic integration.

2. Infrastructure Finance: Following last year's launch of the Asia-Pacific Infrastructure Partnership, the dialogues with Mexico, Peru and the Philippines, and the forum with Deputy Finance Ministers in 2011, APIP plans to focus on the following in 2012:
    a. Dialogues with interested economies. Presently, discussions are being undertaken with Indonesia, Thailand and Vietnam to undertake dialogues in their respective capitals with the APIP private sector panel in collaboration with multilateral institutions (ADB, IDB, IFC and WB). Dates and venues will be confirmed and announced shortly.
    b. Follow-up on the outcomes of the 2011 dialogues. The dialogues with Mexico, Peru and the Philippines highlighted the following needs: (a) deeper understanding of contractual arrangement options and requirements for success (joint ventures, management/service contracts, hybrid model); (b) best practices on legal frameworks to protect interests of and attract long-term investors (including how to deal with necessary adjustments while avoiding modification creep); (c) best practice taxation measures to support PPPs; (d) best practices in design of infrastructure funds providing equity, debt and/or guarantees to catalyze private investment (e.g., UK's Treasury Infrastructure Finance Unit, the P3 Canada Fund, Korean scheme,etc.); (e) best practices in design/implementation of bidding process to achieve value for money (e.g., solicited, unsolicited, interactive bidding processes); (f) best practices in outsourcing of PPP processes (to circumvent civil service requirements that make it difficult for governments to directly hire experts) and (g) best practices in design of PPPs for social infrastructure, particularly health care and education. APIP will discuss with allied institutions how capacity building activities can be developed to address these needs. APIP will also discuss what further advice will be needed related to ongoing undertakings (e.g. reform of legal frameworks and development of social infrastructure PPPs).
    c. Forum on infrastructure finance. Depending on needs, APIP plans to explore the possibility of a forum on specific aspects of infrastructure finance where economies might benefit from an exchange of views with the private sector and multilateral institutions.
3. Venture Capital Finance. The Advisory Group, together with ABAC, is initiating work in 2012 to develop ideas on promoting venture capital finance to spur innovation in the region's emerging economies. A half-day workshop will be held in Kuala Lumpur on 21 May 2012 (tentative date), involving experts, investors, fund managers and venture managers to discuss how the policy and regulatory environment affect the development of venture capital in APEC emerging markets and how this might be enhanced.
4. Regional Financial Integration: Asia-Pacific Financial Markets Integration Project. The Advisory Group and ABAC are initiating discussions on an Asia-Pacific Financial Markets Integration Project. This initiative follows recent discussions on regional financial integration in various fora, where various officials, regulators and private sector representatives have identified this as a desirable goal, and where work has been started in key aspects, including the ongoing work in ASEAN+3 and the Asian Bond Fund of EMEAP. In view of current realities, it now seems important for the region to bring financial integration to a new level with a broader scope. It is assumed that this would require gradual but continuous improvements in regulations and market infrastructure governing both domestic markets and cross-border transactions within the region, over several years, to eventually create the

conditions for seamless financial transactions throughout the region over the long-term. The Advisory Group plans to explore with a small group of representatives from key financial and regulatory authorities in the region and key international institutions the idea of bringing this forward in 2012. For this purpose, the Advisory Group and ABAC are convening a forum in Melbourne on 13 March, with the objective of developing an acceptable and practical idea of how the process of regional financial integration could be pursued through concrete structures or mechanisms.

Dr. Parrenas sought the endorsement by FEWG of the resolutions approved by the Advisory Group during its meeting, which include the Advisory Group 2012 Work Program and the publication of the 2011 Financial Inclusion Forum Report.

What was agreed/decided?

FEWG endorsed the Advisory Group 2012 Work Program and the publication of the 2011 Financial Inclusion Forum Report

12. Other Issues

What was the issue?

Research Proposal: Advice to assist APEC Ministers on issues arising in the Asia-Pacific Infrastructure Partnership (APIP) Dialogues in 2011

What was discussed?

Mr. Mark Johnson, ABAC Australia and Chair of the Advisory Group, presented proposals for funding through the ABAC Research Fund in support of the Asia-Pacific Infrastructure Partnership (APIP). Five topics were identified in the dialogues in 2011 as requiring further detailed analysis, research and detailed advice to ministers. These are as follows:

- A comparative study of legal frameworks to protect long-term interests of pension funds investing in PPPs;
- A comparative study of contractual clauses to provide for the smooth adjustment of physical infrastructure and services through the life-cycle of a PPP project
- Best practices in design of PPPs for social infrastructure, particularly in health care and education.
- Taxation (concept to be developed)
- Evaluation of externalities of PPPs (to be developed)

Mr. Johnson sought the endorsement of FEWG for the projects, which will cost US$5,000 each for a total of US$25,000 for the five projects.

What was agreed/decided?

FEWG agreed to endorse the five projects to ABAC Plenary.

Document: FEWG 32-026 Draft: **FIRST** Source: ABAC USA Date: 12 May 2012 Meeting: Kuala Lumpur, Malaysia

Document Title:
Promotion of Data Flows to Strengthen APEC's Regional Financial Architecture

Purpose: For discussion

Issue: Promoting cross-border data flows to strengthen APEC's regional financial architecture

Background:
International trade relies on a seamless commercial environment that allows for the uninterrupted flow of data across international borders. However, financial services firms are frequently confronted with non-tariff barriers in the form of regulatory restrictions, lack of regulatory coherence, and poor transparency in the development, implementation, and application of regulations. These barriers can prevent access in much the same way as tariffs, but unlike tariffs, no quantitative mechanism exists to reduce them.

Sustained economic growth in the APEC region is heavily dependent on a transparent legal, policy and regulatory environment that permits the free flow of information across borders and facilitates its use for the conduct of trade and commerce.

Proposal /Recommendations:
Due to the cross –cutting nature of cross-border data flows and their importance to enabling trade and investment growth in the region, ABAC USA has refined its recommendations into two work streams:

1. Develop specific finance related recommendations on the promotion of cross-border data flows and incorporate ABAC recommendations on data flows in the 2012 ABAC Report to Finance Ministers. To be finalized at ABAC III.
    i. *Enhance regulatory cooperation and avoid restrictions on legitimate cross-border information flows in the financial services industry;*
    ii. *Actively address impediments to the free flow of information that unnecessarily impede cross-border trade or impose an unreasonable burden on the business community;*
    iii. *Promote international standards, dialogues and best practices; and*
    iv. *Support the application of transparent and non-discriminatory policy.*

2. Identify higher level engagement with APEC Senior Officials on the role of cross-border data flows with the intent of highlighting data flows as a 2013 theme.
    i. *Develop language for inclusion in the ABAC Letter to Trade Ministers*
    ii. *Draft a letter to Indonesian APEC Senior Official supporting the free flow of data incorporating the four main recommendations in this paper and organize a dialogue on the margins of the Indonesian ISOM this fall. Draft a letter from ABAC to the Indonesian SOM.*

Decision Points: Endorse Recommendations

Overview

International trade relies on a seamless commercial environment that allows for the uninterrupted data flows across the private sector, public sector, and international borders. However, financial services firms are frequently confronted with non-tariff barriers in the form of regulatory restrictions, lack of regulatory coherence, and poor transparency in the development, implementation, and application of regulations. These barriers can prevent access in much the same way as tariffs, but unlike tariffs, no quantitative mechanism exists to reduce them.

Sustained economic growth in the APEC region is heavily dependent on a transparent legal, policy and regulatory environment that permits the free flow of information across borders and facilitates its use for the conduct of trade and commerce. A trade friendly environment should:

1. Enhance regulatory cooperation and avoid restrictions on legitimate cross-border information flows in the financial services industry;
2. Actively address impediments to the free flow of information that unnecessarily impede cross-border trade or impose an unreasonable burden on the business community;
3. Promote international standards, dialogues and best practices; and
4. Support the application of transparent and non-discriminatory policy.

What do we mean by cross-border data flows?

For the purpose of ABAC's discussion the recommendations that are being outline are specific to private sector data flows.

> *Private data flows consist of operational business data that support organizational decisions or that sustain administrative functions. This includes, for example, accounts payable, invoices, customer information, employee information, product descriptions, manufacturing instructions and so forth. Private sector data flows play a significant role in financial transactions, such as the posting of credits and debits, and actual transfers of money. Access to computers, servers, routers and mobile devices, services such as cloud computing – whereby remote data centers host information and run applications over the Internet, and information is vital to the success of billions of individuals, businesses and entire economies alike. Financial institutions rely heavily on gathering, processing, and analyzing customer information and will often process data in regional centers, which requires reliable and secure access both to networked technologies and cross-border data flows.*

The four pillars of a trade friendly environment for cross-border data flows, as described above, aim to elevate the discourse of data flows as a trade policy issue. The objective is to treat flows of data and information as comparable, for trade policy purposes, to flows of goods. It helps in this case to compare and contrast the data flows to that of a traditional good or service:

1. Units of data crossing borders to arrive at computer terminals are in principle very much like units of tangible goods traversing oceans to arrive at seaports.
2. Trade in tangible goods has a 70-year-old foundation of strong trade agreements, which encourage predictability in policy and keep markets relatively open; data flows do not.

3. Concepts of market access, non-discrimination, and 'national treatment' developed in negotiations over goods trade can help fix the problem by improving trade agreements and rules, in some cases creating new ones.

Our objective: Modernize international rules and practices governing cross-border flows of data

Trade in manufactured goods has grown for the last half-century not only because of the invention of container-shipping, the larger sizes of freight ships and bulk carriers, and innovations in air cargo, but because trade policies lowered trade barriers and created rules to limit creation of new ones to particular and clearly defined circumstances. The General Agreement on Tariffs and Trade, the centerpiece of this effort, dates to 1947 and has been built upon through eight subsequent multilateral trade agreements through 1996. Best known for cutting tariffs, it also creates an intellectual guide for trade policy through a set of defined principles for flows of goods, and exceptions to those principles:

1. Flows of goods should proceed freely, subject to negotiated rates of tariffs or other import limits;
2. Tariffs should be bound at known and published rates, and should not be augmented by quotas, unreasonable inspections, or other tricks;
3. Governments should be able to limit these flows of goods, regardless of tariffs, to serve public interests such as defending national security, guaranteeing privacy rights, protecting public health, countering threats to public morals, and preventing damage to the environment; and
4. Governments must apply regulations for these purposes on a nondiscriminatory basis; and all laws and regulations should be published and easily accessible.

As APEC works towards the goal of a Free Trade Area of the Asia-Pacific, it should build on a best of breed provisions from recent bilateral and regional trade agreements. A clause in the 'electronic commerce' chapter of the U.S.-Korea Free Trade Agreement, reads as follows:

> *Recognizing the importance of the free flow of information in facilitating trade, and acknowledging the importance of protecting personal information, the Parties shall endeavor to refrain from imposing or maintaining unnecessary barriers to electronic information flows across borders.*

In April 2011 the European Union also developed a document as a guide for future FTA negotiations with other countries that develops a vision for the place of data in trade policy. Entitled *Trade Principles for Information and Communications Technology Services*, the document has nine points ranging from regulatory transparency, access for consumers to services and applications, interconnectivity and more, and includes two data-flow pledges:

> ***Cross-Border Information Flows:*** *Governments should not prevent service suppliers of other countries, or customers of those suppliers, from electronically transferring information internally or across borders, accessing publicly available information, or accessing their own information stored in other countries.*

Local Infrastructure: *Governments should not require ICT service suppliers to use local infrastructure, or establish a local presence, as a condition of supplying services.*

The inclusion supportive language on data flows in pathways to FTAAP such as the Trans Pacific Partnership (TPP) and the Regional Comprehensive Economic Partnership (RCEP) would create a benchmark for the inclusion of cross-border data flows in future trade negotiations. Together these make up a reasonably large export market, and also bring together a group of economies with a wide variety of policies on information access.

How do we align/reconcile ABAC support for free and open cross-border data flows with the APEC Data Privacy Initiative

Cross-border data flows pertinent to privacy protection are those transactions which contain personally identifiable information, such as credit ratings, medical histories and mere lists of names. Personally identifiable information appears in both business and financial data flows. Free and open cross-border data flows and the APEC Data Privacy Initiative are not mutually exclusive. The ultimate goal of the data privacy initiative is to promote data flows as part of commerce, but ensure their integrity at the same time. Ultimately this will help data move more freely, but doesn't address the fundamental problem of digital protectionism; hence ABAC must support cross-border data flows as the underlying principle, while also supporting proper privacy laws are in place to protect cross-border data.

Despite the widespread benefits of cross-border data flows to innovation and economic growth, digital protectionism is a growing threat around the world. Digital protectionism in the form of restrictions on cross-border data flows weakens the regional financial architecture, and results in a regional financial system that is more susceptible to economic crises. Even where policies are designed to support legitimate public interests such as national security or law enforcement, businesses can suffer when those rules are unclear, arbitrary, unevenly applied or more trade-restrictive than necessary to achieve the underlying objective. Additionally, multiple economies may assert jurisdiction over the same information, which may leave businesses subject to inconsistent or conflicting rules.

Data protection and privacy laws lack uniformity and have not kept up with the developments in the business and technological environment. The 1995 EU Data Protection Directive contains perhaps the most detailed rules regulating cross-border data flows of any regional instrument. The 2004 APEC Privacy Framework, which member economies may follow voluntarily, provides protection for personal data transferred internationally based on the principle of accountability. Over 60 countries have adopted data protection or privacy laws that regulate cross-border data flows. Some countries presume data flows should generally be allowed but give regulators the power to block or limit them in certain circumstances (such as many APEC members) while others proceed from the assumption that personal data may not flow outside the jurisdiction unless a legal basis is present (such as in the EU).

There has been a massive growth in the complexity and volume of global data flows and a change in the nature of such transfers in that they no longer constitute point-to-point transmissions but occur as part of a networked series of processes made to deliver a business result. Companies with locations all over the world need to be able to move personal information across national borders in order to efficiently and cost effectively deliver services to its individual customers. Because of the current divergent nature of privacy laws in the various regions of the world (and even within the regions), significant work still needs to be done before a truly global approach for cross-border data flows is possible. Quite simply, unnecessary data flow restrictions are impediments that have adverse implications for consumers, businesses, and economies.

Economies should ensure that data privacy initiatives, such as the APEC Privacy Cross-Border Privacy Rules (CBPRs), as part of the APEC Pathfinder, and any enforcement agreements entered into pursuant to the APEC Cross-Border Privacy Enforcement Arrangement, reflect the above principles of free flow of data across borders, and are consistent with APEC initiatives to promote regional economic integration. APEC Economies should continue working on the means to recognize privacy protection intake and assessment processes that are accountable and capable of outside validation as interoperable with the APEC Cross-Border Privacy Rules (such as Binding Corporate Rules, privacy regulatory regimes, or privacy mark systems). APEC should continue to develop ways for the work product from such systems to be used as an entry point for CBPRs. This will allow participating companies to be able to accrue the benefits of recognition by the APEC privacy initiative, both for consumer awareness and for lower barriers to cross-border data flows. This will enable the APEC Privacy Framework to become more widely used, as it will become an umbrella for privacy regimes that are tailored for a company or sector which meets the appropriate requirements of the APEC Privacy Principles.

Economies should resolve emerging legal and policy issues raised by cross-border data flows. If not properly managed, new regulation in these areas could become significant non-tariff trade barriers to the digital economy. Economies should commit to publish their laws and regulations on these matters, and apply them without discrimination to local and international businesses alike. Economies would remain able to regulate for public safety, privacy, national security and crime control as well as be able to negotiate limits on market access for services, just as they negotiate on cars tariffs and milk quotas.

Beyond financial services: where will ABAC get the best traction in arranging a dialogue with APEC Officials on data flows?

In ABAC's first meeting this year ABAC USA proposed arranging a dialogue with the TELWG to discuss data flows within the context of digital infrastructure and internet policy. Likewise, the SMEWG would be an appropriate forum to discuss the impact that cross-border data flows has on small businesses, innovation, and the internationalization of SMEs.

However, neither of these working groups would be able to address the underlying trade, investment, and finance related steps that would need to be taken to truly allow the free flow of data that is integral to our recommendations. Cross-border data flows are a cross cutting issue and impact several industries. Intersessionally ABAC USA consulted with APEC officials and private sector stakeholders to determine an appropriate venue for addressing cross-border data flows as part of a broader trade policy issues.

Therefore, ABAC USA recommends that rather than isolate the discussion to a single APEC working group, the issue of cross-border data flows should be raised during the Indonesian ISOM this fall. This would allow ABAC to raise awareness of the cross cutting nature data flows and develop a more comprehensive strategy to address the issue.

Conclusions

Without new policies, efforts to block data, build new and greater firewalls, and demand that servers be located in country, are likely to spread. If so, cross-border data flows will be slower and more fragmented, marked by arbitrary and coercive demands which limit growth, harm export opportunities, and the region's population will be denied the open, sophisticated, wealthy global economy it ought to have.

With security strengthened through trade policy, though, data flows will be able to serve an instrumental role in economic growth. Trade rules would create a presumption that data should be able to move freely across borders, accept negotiated limits on market access for services, and guarantee rights to public-interest regulation done in transparent ways and applied evenly to local and international businesses.

ABAC Implementation Plan

Due to the cross –cutting nature of cross-border data flows and their importance to enabling trade and investment growth in the region, ABAC USA proposes two work streams:

1. **Develop specific finance related recommendations on the promotion of cross-border data flows and incorporate ABAC recommendations on data flows in the 2012 ABAC Report to Finance Ministers. (To be finalized at ABAC III)**

2. **Identify higher level engagement with APEC Senior Officials on the role of cross-border data flows with the intent of highlighting data flows as a 2013 theme.**

    i. **Finalize language for inclusion in the ABAC Letter to Trade Ministers (to be finalized at ABAC II)**

    Supporting cross-border data flows. *International trade relies on a seamless commercial environment that allows for the uninterrupted data flows across borders. Massive growth in the complexity and volume of global supply chains means that cross-border data flows no longer constitute point-to-point transmissions but occur as part of a globally networked series of processes made to deliver a business result. Companies with locations all over the world need to be able to move personal information across national borders in order to efficiently and cost effectively deliver services to their individual customers. Regulatory restrictions, lack of regulatory coherence, and poor transparency in the development, implementation, and application of regulations on cross-border data flows are significant non-tariff trade barriers to trade, particularly in the services economy, given that cross-border services trade is, at its essence, the exchange of data. ABAC urges Ministers to modernize international rules and practices governing cross-border flows of data, treat flows of data and information as comparable to the flows of goods, and ensure that data privacy initiatives, such as the APEC Data Privacy Pathfinder, reflect the principles of free flow of data across border.*

ii. **Draft a letter to Indonesian APEC Senior Official supporting the free flow of data incorporating the four main recommendations in this paper and organize a dialogue on the margins of the Indonesian ISOM this fall. Draft a letter from ABAC to the Indonesian SOM. (to be finalized at ABAC III)**

Document: FEWG 32-017 Draft: **FIRST** Source: IMF Date: 7 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title: Update of G20 and implications for APEC business environment
Purpose: For discussion / kick-off item
Issue: The Euro crisis and consequences for global and regional financial stability
Background: The Euro area crisis reached a point of intense stress in late 2011 and investors grew increasingly concerned about the risk of a disorderly bank or sovereign default. Subsequent policy actions, notably the European Central Bank's (ECB's) provision of collateralized three-year liquidity to banks, have brought some much needed relief, but the risks to global financial stability remain elevated and Euro area sovereign bond markets remain vulnerable under the weight of strained fiscal positions and shrinking demand from traditional investors. These fiscal challenges are by no means confined to the Euro area. Most emerging markets have policy room to buffer moderate deleveraging forces emanating from Europe, but their resilience could be tested under a weak policies scenario. Stability should not be taken for granted. There are cutbacks in lending in advanced economies, mainly in the European Union and the United States and in Latin America. Lending to emerging Asia however is less affected than to other emerging market regions. Emerging markets have deftly navigated the financial shocks and economic spillovers from advanced economies so far, but are vulnerable to a sharp pullback of bank credit and crossborder lending, a sudden reversal in capital flows, and domestic weaknesses in some economies. The IMF report analyses the risks to global financial stability by comparing three policy scenarios: i) A baseline scenario of current policies, where systemic risks are averted but strains remain, as policymakers do not capitalize on recent progress to complete the reforms that are needed to secure lasting stability; ii) An upside scenario of complete policies, where policymakers further strengthen crisis management, pursue bank restructuring, and commit to a road map for a more financially and fiscally integrated monetary union, including a prudent framework for ex-ante risk sharing; iii) An adverse scenario of weak policies, where current policies are either not implemented fully (or rapidly enough) or are overwhelmed by external shocks, which results in conditions deteriorating to the point of reviving acute market tension.
Proposal /Recommendations: ➢ Policymakers need to build on recent stabilization gains by swiftly implementing a comprehensive set of policies to secure lasting financial stability. ➢ Policymakers need to coordinate a careful mix of financial, macroeconomic, and structural policies that ensure a smooth deleveraging process, support growth, and facilitate rebalancing. ➢ Continue progress in implementing the G20 regulatory reform agenda to support the long-lasting stability of the financial system.
Decision Points: Endorse further action and recommendations.

International Monetary Fund

Global Financial Stability Report

April 2012

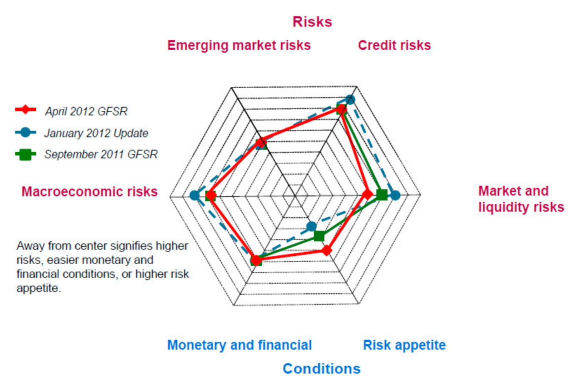
The Quest for Lasting Stability: Press Points for Chapters 1-2

What are the Key Stability Risks and Challenges?

- ***Policymakers need to build on recent stabilization gains by swiftly implementing a comprehensive set of policies to secure lasting financial stability.***
- ***Sovereign bond markets remain fragile, due to strained fiscal positions and a shrinking demand from traditional investors. Financing public debt could still prove challenging for some euro area countries.***
- ***Banks remain under pressure to raise capital or reduce assets by scaling back credit or cutting business lines. Some of these adjustments are healthy, but there is a risk that a synchronized, large-scale, and aggressive reduction in European bank assets might have serious repercussions for the economy.***
- ***Emerging markets have deftly navigated the financial shocks and economic spillovers from advanced economies so far, but are vulnerable to a sharp pullback of bank credit and cross-border lending, a sudden reversal in capital flows, and domestic weaknesses in some economies.***
- ***Policymakers need to coordinate a careful mix of financial, macroeconomic, and structural policies that ensure a smooth deleveraging process, support growth, and facilitate rebalancing. In the euro area, a clear path towards a more integrated economic and monetary union, built on solidarity and strengthened risk-sharing arrangements, is essential.***

Recent policy actions brought some much-needed relief, but the risks to global financial stability remain elevated (Figure 1). In late 2011, severe stress in the euro area's banking and government bond markets pushed financial stability risks to a new peak of intensity. Subsequent policy actions eased bank funding strains, reducing market and liquidity risks, and helped stabilize sovereign markets. Risk appetite was also boosted, but risks to global financial stability remain elevated. This report calls on policymakers to build on recent improvements in market conditions by swiftly implementing a comprehensive set of policies to achieve durable stability.

Figure 1. Global Financial Stability Map



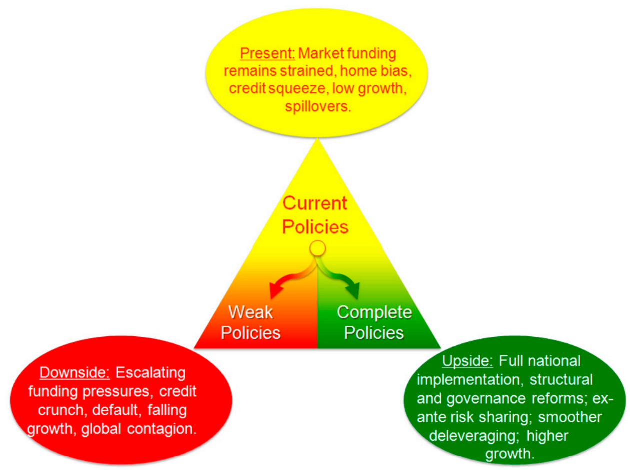
Source: IMF staff estimates.

Recent policy action has provided a much-needed reprieve, but euro area sovereign bond markets remain vulnerable, due to strained fiscal positions and shrinking demand from traditional investors. Financing public debt could still prove challenging for some euro area countries. A lasting recovery in market confidence will take time, during which domestic policy efforts may need to be bolstered by stronger external support. Countries currently facing market pressures need to sustain their resolve to rectify fiscal imbalances in a well-timed manner.

Fiscal challenges are by no means confined to the euro area. The United States and Japan have yet to forge the political consensus for medium-term deficit reduction needed to remove persistent latent risks to financial stability.

This report analyzes the risks to global financial stability by comparing three policy scenarios (Figure 2): (i) a baseline scenario of *current policies*, where systemic risks are averted but strains remain, as policymakers do not capitalize on recent progress to complete the reforms that are needed to secure lasting stability; (ii) an upside scenario of *complete policies*, where policymakers further strengthen crisis management, pursue bank restructuring, and commit to a road map for a more financially and fiscally integrated monetary union, including a prudent framework for ex-ante risk sharing; and (iii) an adverse scenario of *weak policies*, where current policies are either not implemented fully (or quickly enough) or are overwhelmed by external shocks, which results in conditions deteriorating to the point of reviving acute market tension.

Figure 2. Policy Action to Entrench Stability and Avoid Downside Risks



Source: IMF staff estimates.

Bank Deleveraging—Why, What, by How Much, and Where? Banks have been under pressure to deleverage since the outbreak of the subprime crisis. Pressures on European banks escalated at the end of 2011, as sovereign stress increased and many private funding channels closed. The ECB's provision of longer-term funding has substantially eased banks' funding strains, but they still need to raise capital or reduce assets by cutting business lines or scaling back credit. Some of these adjustments are healthy since high leverage is no longer supported—by either markets or regulators—and some activities are no longer viable. However, there is a risk that a synchronized, large-scale, and aggressive reduction in European bank assets might have serious negative repercussions for the economy and financial markets in the euro area and beyond.

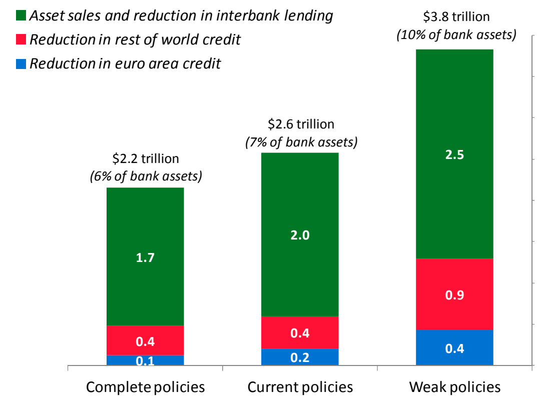
Under the *current policies* scenario, this GFSR estimates that large EU-based banks could shrink their combined balance sheet by some \$2.6 trillion (€2.0 trillion) between end-September 2011 and end-December 2013, which represents almost 7 percent of bank assets (Figure 3). Most of this asset reduction is estimated to occur through sales of securities and noncore assets, but about a quarter could occur through a cutback in lending (Figure 4). Under the *current policies* scenario, the negative impact on euro area credit supply from EU bank deleveraging is estimated at around 1.7 percent of credit outstanding. But under the *weak policies* scenario, the decline of euro area credit could be as high as 4.4 percent over the two years, causing euro area real GDP to be 1.4 percent lower than the baseline at the end of 2013. The impact of bank deleveraging is global, although it will likely be strongest in the periphery of the euro area and in emerging Europe.

Figure 3. Impact of European Bank Deleveraging Under Three Policy Scenarios, Through End-2013

Scenario	Change in Bank Assets[1] (US$ trillions)	(percen	Change in Euro Area Supply of Bank Credit[2] (percent)	Change in Euro Area GDP[3] (percent)
Complete	–2.2	–6	–0.6	0.6
Current	–2.6	–7	–1.7	-
Weak policies	–3.8	–10	–4.4	–1.4

Source: IMF staff estimates.
[1]For a sample of 58 large EU banks.
[2]Domestic and direct cross-border credit relative to level in 2011 Q3.
[3]Change from level of GDP in 2011, relative to the current policies

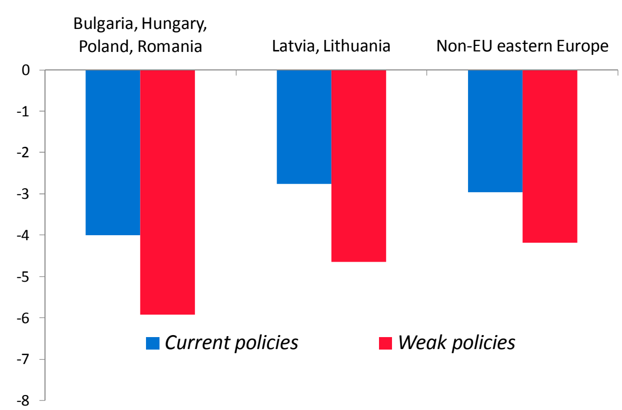
Figure 4. Contributions to Aggregate Reduction in Bank Assets
(In trillions of U.S. dollars)



Source: IMF staff estimates.
Note: For a sample of 58 large EU banks.

Most emerging markets have policy room to buffer moderate deleveraging forces emanating from Europe, but their resilience could be tested under a weak policies scenario. Stability should not be taken for granted. Among emerging markets, emerging Europe is most vulnerable, given the region's large economic exposure and strong banking links to the euro area, as well as its large gross external financing needs and more limited policy buffers (Figure 5). More broadly, a re-intensification of strains in the euro area could lead to a reversal of capital flows, amplifying the negative effects of bank deleveraging. Although many emerging markets have substantial buffers and adequate policy room, homegrown vulnerabilities in some economies could magnify the impact of external shocks.

Figure 5. Reduction in Supply of Credit by Sample Banks in Emerging Europe: Current and Weak Policies Scenario
(In percent of total domestic private credit)



Source: IMF staff estimates.
Note: For a sample of 58 large EU banks.

The Quest for Lasting Stability

- ***Euro area policy makers need to take further steps to entrench stability.*** The first step is the continued implementation of well-timed fiscal consolidation policies at the national level, supported by growth-enhancing policies, including sufficiently accommodative monetary policy, and structural reforms that raise potential growth. The second step is further progress on bank restructuring and resolution, which is essential to complement the bank capital and provisioning increases currently under way. The recently strengthened financing backstop will help bolster reform efforts. This "firewall" should also be able to take direct stakes in banks in order to help break the adverse feedback loop between sovereigns and banks. The third step is achieving longer-term reform objectives to underpin stability. These include developing—and committing to—a roadmap for a more financially and fiscally integrated monetary union. This requires a more centralized euro area coordination of policies and a common framework for bank supervision and resolution as well as deposit insurance, and greater progress toward ex-ante sharing of fiscal risk.

- ***Macroprudential authorities need to ensure an orderly process of deleveraging.*** This requires close macroprudential oversight by European banking authorities of bank business plans. A key challenge will be to control spillovers from the euro area into emerging Europe and elsewhere.

- ***Both Japan and the United States need to put in place credible multi-year plans for deficit reduction,*** which protect short-term growth but reassure financial markets that debt will return to a sustainable trajectory over the medium term.

- ***Policymakers in emerging markets should stand ready to use their existing policy space to cushion negative external shocks.*** However, policy makers need to be cautious. For example, the scope for easing credit policy may be limited in some countries, due to sustained periods of above-trend credit expansion. At the same time, home grown vulnerabilities should be addressed to further increase resilience.

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- ***Long-lasting stability of the financial system will be supported by progress in implementing the G20 regulatory reform agenda.***

CHAPTER 2

SOVEREIGNS, BANKS, AND EMERGING MARKETS: DETAILED ANALYSIS AND POLICIES

The Sovereign Debt Crisis—Shifting From a Bad to a Good Equilibrium

Stresses in euro area government bond markets escalated in late 2011 as investors grew increasingly concerned about the risk of a disorderly bank or sovereign default. Subsequent policy actions, notably the European Central Bank's (ECB's) provision of collateralized three-year liquidity to banks, have relieved acute stress. Yet sovereign bond markets remain fragile under the weight of strained fiscal positions and an ongoing loss of demand from traditional investors. Financing public debt could still prove challenging for some euro area countries. A lasting recovery in market confidence will take time, during which domestic policy efforts need to be bolstered by stronger external support, notably an enhanced financial firewall.

The euro area crisis reached a point of intense stress in late 2011.

Concerns about a possible chain reaction of bank failures and sovereign defaults intensified in late 2011. Credit default swap spreads rose to new highs; even sovereigns with relatively strong public finances (including Austria, Finland, and the Netherlands) were hit by illiquid market conditions (Figure 2.1). In the absence of credible funding backstops for vulnerable countries, a steady stream of negative news—the need for higher write-downs on Greek sovereign bonds under the envisaged private sector involvement agreement, fresh political turmoil in Greece and Italy, and acute funding pressures for euro area banks—undermined already fragile investor confidence. The episode underscored the risk that adverse self-fulfilling shifts in market sentiment could rapidly push fragile sovereigns into a bad equilibrium of rising yields, a funding squeeze for domestic banks, and a worsening economy.

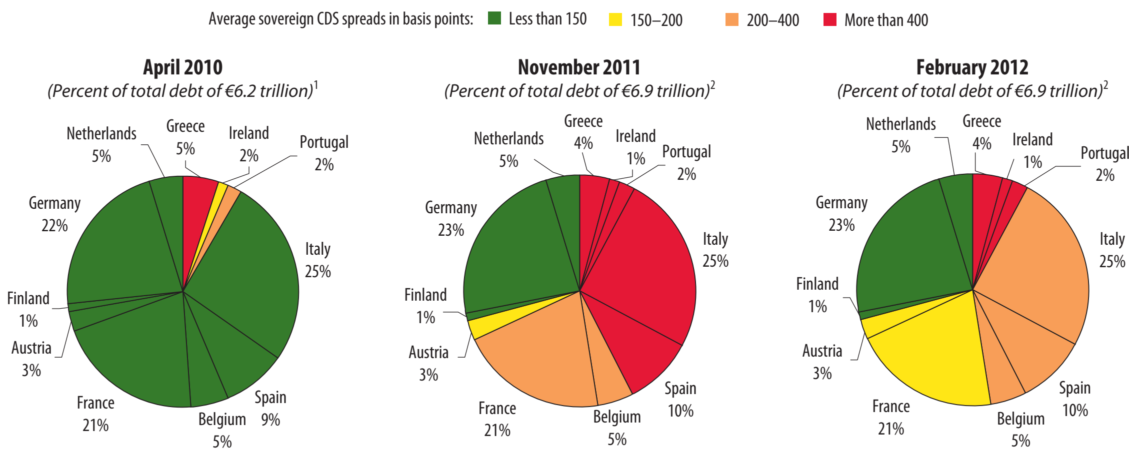
Indeed, government bond yields and volatilities for several vulnerable sovereigns rose to precarious levels (Figure 2.2), while inverted yield curves suggested acute concern about default risk. Banks that were holding Spanish and Italian government bonds in their trading portfolio faced significant mark-to-market losses, as valuations tumbled. Some institutions responded to increasing market and regulatory scrutiny of their government bond holdings by trimming exposures, thereby adding to selling pressures. Meanwhile, market makers contributed to the collapse in trading volumes as they were forced to reduce their activity because of risk limits (Figure 2.3). Haircuts on Italian government bonds used as collateral in repo (repurchase agreement) markets were increased several times, further reducing the incentive to hold such bonds. These factors combined to forcefully roil sovereign bond markets in late 2011.

Traditional bond investors took fright from rising credit risk, fresh rating downgrades, and unprecedented market volatility.

Foreign banks have been divesting from the sovereign debt of the stressed euro area periphery since 2010, starting with Greece (2010:Q1), followed by Portugal and Italy (2010:Q2), and then Ireland and Spain (2010:Q3) (Figure 2.4). Amid the increased market turmoil, foreign institutional investors continued to shed exposure to these countries in 2011 (Figure 2.5). In the third quarter of 2011, foreign

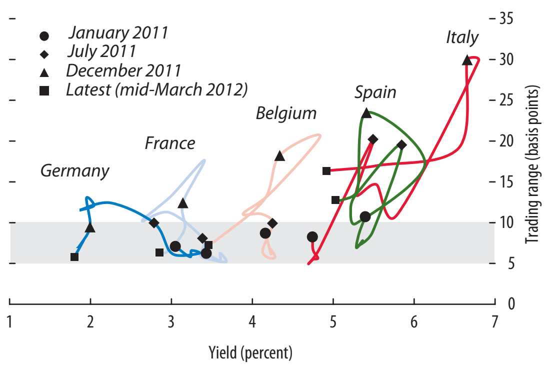
Note: This chapter was written by Peter Dattels and Matthew Jones (team leaders), Sergei Antoshin, Serkan Arslanalp, Ana Carvajal, Eugenio Cerutti, Jorge A. Chan-Lau, Nehad Chowdhury, Sean Craig, Jihad Dagher, Reinout De Bock, Giovanni Dell'Ariccia, Martin Edmonds, Michaela Erbenova, Luc Everaert, Jeanne Gobat, Tommaso Mancini Griffoli, Vincenzo Guzzo, Kristian Hartelius, Sanjay Hazarika, Eija Holttinen, Anna Ilyina, William Kerry, Peter Lindner, Estelle Xue Liu, André Meier, Paul Mills, Esther Perez Ruiz, Marta Sánchez Saché, Jochen Schmittmann, Alasdair Scott, Katharine Seal, Mark Stone, Narayan Suryakumar, Takahiro Tsuda, Nico Valckx, and Chris Walker. Guidance on iFlow[SM] data and interpretation was provided by Samarjit Shankar, managing director, BNY Mellon.

Figure 2.1. Credit Default Swap Spreads in Selected Euro Area Government Bond Markets



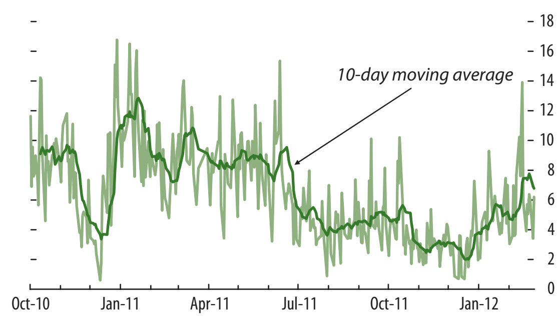
Sources: Bank for International Settlements; Bloomberg L.P.; and IMF staff estimates.
Note: Percentages for countries are their share of euro area government debt for period indicated.
[1]As of 2010:Q1.
[2]As of 2011:Q2.

Figure 2.2. Ten-Year Government Bond Yields and Trading Ranges, Selected Euro Area Countries, 2011–12



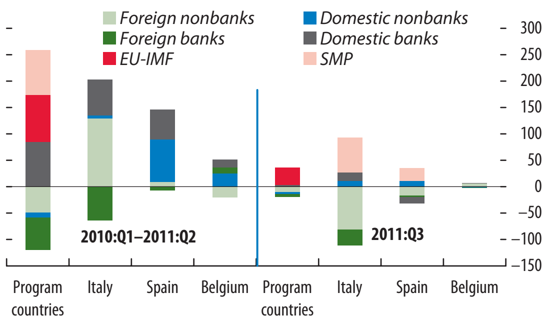
Source: Bloomberg L.P.
Note: Data are monthly averages.

Figure 2.3. Daily Trading Volume of Italian Sovereign Bonds
(In billions of euros)



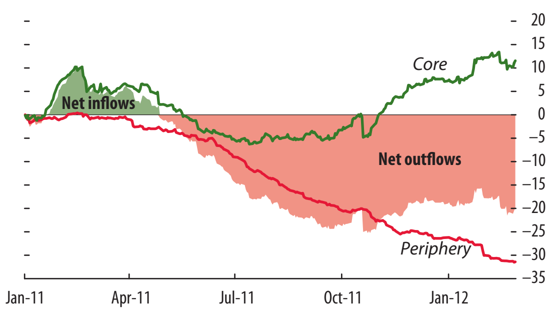
Source: MTS Data.
Note: Bonds are BTP (Buoni del Tesoro Poliennali)—multiyear Treasury bonds with maturities of 3 to 30 years. Includes purchases and sales.

Figure 2.4. Changes in the Sovereign Investor Base
(In billions of euros)



Sources: Bank for International Settlements; European Central Bank; Eurostat; IMF International Financial Statistics database; IMF-World Bank Quarterly External Debt Statistics; and IMF staff estimates.
Note: Program countries are Greece, Ireland, and Portugal. SMP = ECB's Securities Markets Program. EU-IMF = joint EU and IMF euro area support programs. SMP data are estimates.

Figure 2.5. Custodial Holdings of Selected Euro Area Sovereign Bonds, 2011
(Cumulative flows, in billions of euros)



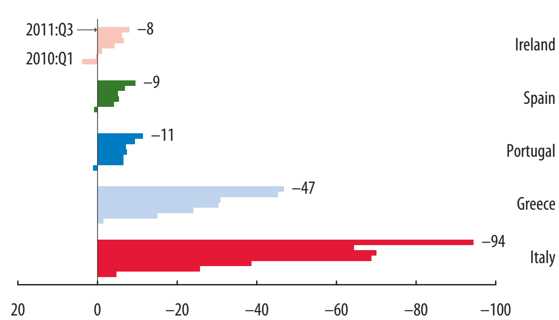
Sources: BNY Mellon iFlow[SM]; and IMF staff estimates.
Note: Core = Austria, Belgium, Finland, France, Germany, and Netherlands. Periphery = Greece, Ireland, Italy, Portugal, and Spain.

banks made large withdrawals from Italy (Figure 2.6) that coincided with the heightened stress in Italian and Spanish sovereign debt markets. These outflows were largely offset by the ECB's Securities Markets Program (SMP) and by domestic purchases.

The erosion of the foreign investor base can be attributed to several distinct factors:

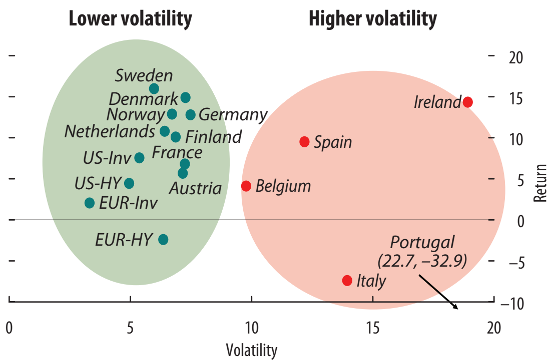
- *Rising credit risk and market volatility* deterred investors that seek steady, low-risk returns, such as central banks, insurance companies, and pension funds. Risk-adjusted returns in sovereign debt markets in Italy and Portugal deteriorated significantly in 2011 because of higher volatility and weak bond prices, particularly in comparison with other OECD sovereign issuers (Figure 2.7). The sudden emergence of high and volatile credit risk premiums also scared off hedge funds and other asset managers used to trading pure interest rate risk. Their withdrawal from the market further heightened problems of illiquidity and large price fluctuations, underscoring the self-reinforcing nature of the bond market rout.
- *Rating downgrades and exclusion from benchmarks.* Several large buy-and-hold investors have begun to change benchmarks for their sovereign bond portfolios, removing countries that are perceived to be subject to greater credit risk or more volatile

Figure 2.6. Cumulative Change in Foreign Bank Holdings of Sovereign Debt of Selected Euro Area Countries, 2010:Q1–2011:Q3
(In billions of euros)



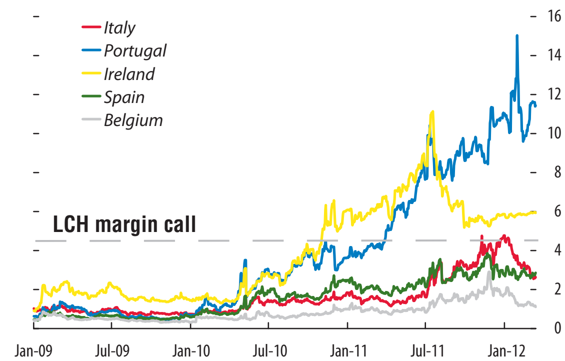
Sources: Bank for International Settlements; Eurostat; and IMF staff estimates.
Note: Cumulative change is shown for seven successive quarters, from 2010:Q1 through 2011:Q3.

Figure 2.7. Returns and Volatility of U.S. and European Sovereign Bonds, 2011
(In percent)



Sources: Bank of America Merrill Lynch; and IMF staff estimates.
Note: EUR = European. HY = high yield. Inv = investment grade.

Figure 2.8. Ten-Year Peripheral Euro Area Government Bond Spreads over AAA Core
(Spread in percent)



Source: Bloomberg L.P.
Note: LCH = LCH Clearnet.

returns. Sovereign downgrades can also trigger selling by benchmark-oriented investors.[1]

- *Increased haircuts on repo transactions*. The sharp rise in yields has also reduced the collateral value of peripheral bonds. Under the rules of LCH Clearnet, margin requirements are raised once the spread on 10-year bonds relative to core issuers exceeds 450 basis points.[2] This happened successively to Greece (in May 2010), Ireland (November 2010), and Portugal (April 2011). Spanish and Italian spreads hit the threshold in November 2011 but since then have fallen back below it (Figure 2.8).

Fresh policy actions, especially by the ECB, relieved acute pressures by early 2012.

In response to these intense pressures, the new governments in Italy and Spain announced important policy measures to bring down fiscal deficits and address structural weaknesses in their economies. Moreover, euro area policymakers reached agreement on expanding the lending capacity of the European Financial Stability Facility (EFSF), brought forward the effective date of the European Stability Mechanism (ESM), and adopted a "fiscal compact" that aims to contain the emergence of excessive deficits in the future.[3] Although the longer-term value of the agreed compact is clear, investors generally saw its short-term benefits as limited, except to the extent that it might allow the ECB to step up its purchases of government bonds (Figure 2.9).

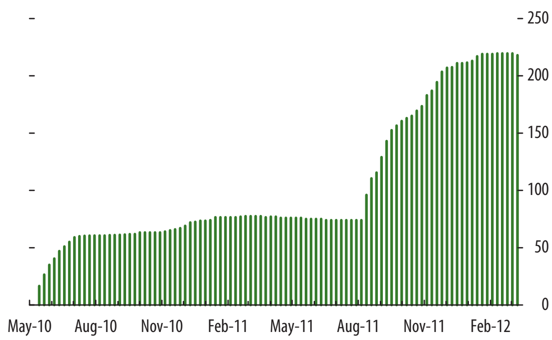
Central bank actions in late 2011 proved more effective in turning around investor sentiment. First, on November 30, the Federal Reserve agreed to reduce the cost of its swap lines with major central banks, including the ECB, making it cheaper for euro area banks to meet their need for short-term dollar funding. On December 8, the ECB announced that it would cut its policy rate by 25 basis points, to 1.0 percent, and reduce bank reserve requirements from 2 percent to 1 percent. Even more important, the ECB also announced that it would offer unlimited amounts of collateralized loans to euro area banks through three-year longer-term refinancing operations (LTROs) and expand the pool of collateral eligible for those transactions. The first such operation, launched on December 21, attracted bids from 523 banks for a total of €489 billion. It was followed by a second round of LTROs on February 29, which provided an additional €529 billion to 800 banks and covered a substantial part of near-term funding needs. The three-year ECB loans

[1]One case in point is the sharp underperformance of Portugal's bonds after their recent removal from the Citigroup World Government Bond Index.

[2]The rules for LCH Clearnet S.A. are different for Italian bonds.

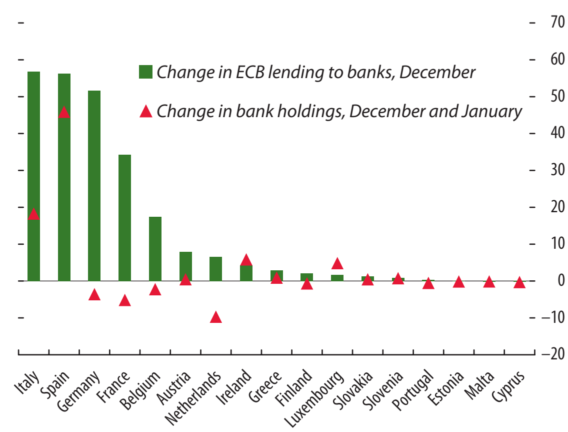
[3]In March, euro area policymakers followed up on their earlier commitment to review the overall ESM/EFSF envelope, by agreeing to temporarily combine both facilities so as to ensure a fresh lending capacity of €500 billion even before ESM capital is fully paid in.

Figure 2.9. ECB Purchases of Government Bonds under Its SMP
(Cumulative, in billions of euros)



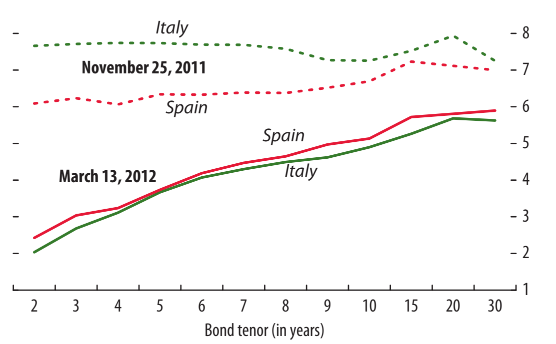
Sources: Bloomberg L.P.; and European Central Bank.
Note: Weekly data. SMP = Securities Markets Program.

Figure 2.10. ECB Lending and Bank Holdings of Euro Area Sovereign Bonds, December 2011–January 2012
(In billions of euros)



Source: European Central Bank.

Figure 2.11. Yields on Government Bonds of Italy and Spain, November 2011 and March 2012
(In percent)



Source: Bloomberg L.P.

progressively came to be viewed as a crucial measure to curb the tail risk of disastrous bank failures.

Reflecting the improved sentiment, default risk premiums on bank debt eased markedly, and equity valuations recovered. In addition, the cheap longer-term funds led some banks, notably in Italy and Spain, to buy short-dated government paper, reaping the significant spread between bond yields and the ECB policy rate (Figure 2.10). The ECB's acceptance of Italian banks' government-guaranteed bonds issued to themselves as collateral also contributed to alleviate immediate pressures. The combined effect of lower tail risk perceptions and some "carry-trading" in peripheral euro area bonds, plus growing speculative flows and short-covering by institutional investors, caused yield curves to shift downward markedly beginning in late November. This was initially led by the short end of the yield curve but later extended to longer maturities (Figure 2.11). At this stage, however, there is still great uncertainty as to whether these developments will have durable effects on the stability of the investor base, and, of late, there has been some retrenchment and increased market volatility.

Nonetheless, as the policy response to the crisis has so far failed to restore confidence, many sovereigns remain in a zone of vulnerability.

Despite this welcome improvement in market sentiment, the fundamental challenges facing euro area sovereigns—as well as those in several other advanced economies—remain significant. Public finances remain under strain, reflecting various combinations of high primary deficits, weak growth, and large debt stocks. Many countries, notably in the euro area, have embarked on the process of fiscal consolidation to reach safer positions, but this effort will take many years. In the meanwhile, sovereigns remain exposed to sudden shifts in investor perceptions that can tilt the balance from a good equilibrium—which features low funding costs and affordable debt—to a bad equilibrium—where funding becomes very costly or even unavailable, reviving default risk.[4]

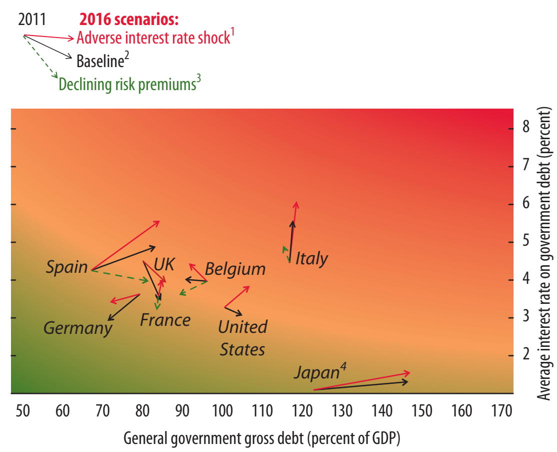
The policy response to the unfolding crisis in the euro area has been unprecedented in its breadth and scope. Yet, the key question remains whether enough has been done to entrench stability. To address this question, we analyze sovereign risks in terms of funding costs, debt servicing ability, and investor base dynamics under a baseline scenario and under upside and downside shocks. The baseline corresponds to the "current policies" scenario detailed in Chapter 1 and, in essence, extrapolates trends on the basis of current market conditions. Similarly to the analysis in the April 2011 GFSR, we project debt and interest payments assuming market forward interest rates and country-specific issuance strategies to be in line with historical patterns.[5] The scenarios can be explored through standardized sensitivity tests that compare vulnerabilities across countries. To this end, we consider upside and downside scenarios corresponding to the "complete policies" and "weak policies" scenarios in Chapter 1. In the complete policies setting, spreads over German yields are halved from 2013. In the weak policies situation, yields rise by one standard deviation across the board starting in 2013. The results are illustrated in Figure 2.12.

Within the euro area, Italy is facing a particular challenge as high current debt levels interact negatively with elevated marginal funding costs (Table 2.1). Even under the complete policies scenario, the average interest rate on Italy's public debt rises somewhat by 2016,

[4]See the April 2012 *Fiscal Monitor* for further analysis.

[5]Projections are made using *World Economic Outlook* (WEO) inputs for primary deficits, real growth, and inflation. Debt service projections are based on Bloomberg data (made consistent with WEO aggregates). Interest rates are forecast on the basis of market data as of March 13, 2012. IMF program countries are excluded from the projections.

Figure 2.12. Projections for Government Debt and Average Interest Rate in Selected Advanced Economies, 2011–16



Sources: Bloomberg L.P.; IMF, World Economic Outlook (WEO) database; and IMF staff calculations.

[1]Assumes a permanent increase in interest rates by one standard deviation (computed for the 2002–11 period) across the curve, starting in 2013. The size of the assumed country-specific interest rate shock, averaged over all bond maturities under consideration, is (in basis points), for Belgium, 85; France, 88; Germany, 95; Italy, 93; Japan, 34; Spain, 98; United Kingdom, 102; United States, 114.

[2]Based on WEO projections for primary balance and GDP, combined with market interest rate structure as of March 13, 2012. The computations use a large set of forward rates for each country; the following five-year bond yields are given here to provide a snapshot of market conditions on the cutoff date: Belgium, 2.11%; France, 1.72%; Germany, 0.80%; Italy, 3.67%; Japan, 0.30%; Spain, 3.74%; United Kingdom, 1.05%; United States, 0.98%. Projections do not take into account "below the line" financing operations that could also affect debt dynamics.

[3]Assumes a permanent reduction in spreads over German bunds by 50 percent, starting in 2013. Shown for selected countries only. As an illustration, the spread of five-year government bonds over German bunds on the cutoff date was (in basis points), for Belgium, 131; France, 92; Italy, 287; Spain, 293.

[4]Calculations for Japan based on net debt.

to about 4.6 percent. But it would climb to 5.3 percent if current yield levels are maintained, as assumed under the current policies scenario, and exceed 5.7 percent under the increase in marginal funding costs assumed under the weak policies scenario. Spain's debt dynamics are also challenging, though for different reasons: the country starts from relatively low levels of indebtedness, but unlike Italy continues to run sizable primary deficits, which push up debt levels even if interest rates remain contained.

Many other countries also require moderate funding costs to keep their public finances on an even keel. In particular, Japan and the United States continue to benefit from very low interest rates despite rapidly growing debt stocks which, even under the baseline, are making them more vulnerable. This observation underscores that fiscal challenges are by no means confined to the euro area. But whereas market pressures have led

Table 2.1. Sovereign Debt: Market and Vulnerability Indicators

(Percent of WEO projection of 2012 GDP except as noted)

	Fiscal and Debt Fundamentals			Financing Needs[1]		External Funding	Banking System Linkages			Sovereign Credit[2]		Sovereign CDS
	Gross general government debt, 2012[3]	Net general government debt, 2012[4]	Primary balance, 2012[5]	Gross general government debt maturing plus budget deficit		General government debt held abroad[6]	Domestic depository institutions' claims on general government[7]		BIS reporting banks' consolidated international claims on public sector[8]	Rating (notches above speculative)	Outlook as of Feb. 1, 2012	Five-year as of end-2011 (basis points)
				2012	2013		Percent of 2012 GDP	Percent of depository institutions' consolidated assets				
Australia	24.0	9.5	–2.0	4.9	3.6	10.6	2.5	1.4	2.6	10	Stable	83
Austria	73.9	54.1	–0.9	8.6	8.7	59.2	15.3	4.7	11.4	9	Stable	186
Belgium	99.1	84.2	0.5	19.3	19.5	56.5	23.1	7.3	13.5	7	Negative	311
Canada	84.7	35.4	–3.1	16.1	17.8	16.7	17.8	10.1	3.0	10	Stable	n.a.
Czech Republic	43.9	n.a.	–2.2	12.5	12.6	12.4	17.0	14.3	4.4	6	Stable	174
Denmark	51.3	8.4	–5.5	13.6	11.3	22.8	14.9	3.4	6.9	10	Stable	135
Finland	51.6	–57.1	–2.0	8.6	8.0	44.2	6.3	1.9	12.2	10	Stable	78
France	89.0	83.2	–2.2	18.2	19.5	56.3	16.9	4.1	7.2	9	Stable	220
Germany	78.9	54.1	1.0	8.9	8.5	48.3	21.2	6.7	10.0	10	Stable	102
Greece	153.2	n.a.	–1.0	. . .	. . .	87.5	28.7	12.4	15.7	–8	Negative	8786
Ireland	113.1	102.9	–4.4	15.3	14.7	65.7	26.8	3.3	4.8	2	Negative	724
Italy	123.4	102.3	3.0	28.7	23.9	48.8	32.0	12.4	9.6	4	Negative	484
Japan	235.8	135.2	–8.9	59.1	59.5	19.2	79.3	24.6	1.8	7	Negative	143
Korea	32.9	31.5	1.6	0.9	0.4	4.5	5.2	3.8	3.5	5	Stable	161
Netherlands	70.1	36.0	–3.2	14.9	16.4	40.4	13.3	3.4	7.8	10	Stable	119
New Zealand	36.0	11.5	–3.8	8.8	11.7	22.4	7.3	4.2	3.7	8	Negative	94
Norway	49.6	–173.7	11.9	–10.1	–6.7	22.3	n.a.	n.a.	6.2	10	Stable	45
Portugal	112.4	110.9	0.1	26.7	19.7	61.5	19.3	5.6	9.6	0	Negative	1082
Slovak Republic	47.1	n.a.	–2.7	11.7	13.6	16.8	16.7	20.7	9.1	5	Stable	300
Slovenia	52.5	n.a.	–3.0	7.9	7.4	29.9	13.7	9.3	8.9	5	Negative	400
Spain	79.0	67.0	–3.6	20.9	21.5	28.4	26.5	7.7	5.9	5	Negative	380
Sweden	35.5	–20.1	–1.1	4.5	1.9	14.7	6.6	2.5	4.2	10	Stable	78
United Kingdom	88.4	84.2	–5.3	14.8	13.9	24.8	8.5	n.a.	2.8	10	Stable	98
United States	106.6	83.7	–6.1	25.8	26.2	29.7	7.1	5.1	3.6	9	Negative	49

Sources: Bank for International Settlements (BIS); Bloomberg L.P.; IMF, International Financial Statistics, Monetary and Financial Statistics, and World Economic Outlook (WEO) databases; BIS-IMF-OECD-World Bank Joint External Debt Hub (JEDH); and IMF staff estimates.

Note: Based on projections in the April 2012 *World Economic Outlook*, which also summarizes the policy assumptions. CDS = credit default swaps.

[1]As a percent of WEO projection of GDP for the year indicated.

[2]Rating as notches above speculative grade is the average of long-term foreign currency debt ratings by Fitch, Moody's, and Standard & Poor's rating agencies, rounded down; outlook is based on the most negative of the three agencies' ratings.

[3]All liabilities that require the government to make future payments of interest and/or principal to the creditors, including SDRs, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable.

[4]Gross debt minus financial assets that are debt instruments; the financial assets are monetary gold and SDRs, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts receivable.

[5]Primary net lending/borrowing balance for general government. Data for Korea are for central government.

[6]Most recent data from JEDH divided by WEO projection of 2012 GDP. JEDH and WEO debt data are incompatible when one set is at market value and the other is nominal. Data for New Zealand are from Reserve Bank of New Zealand.

[7]Claims exclude those of the central bank on general government. For the United Kingdom, claims are on the public sector. Data are for fourth quarter of 2011 or latest available.

[8]On an immediate borrower basis as of September 2011.

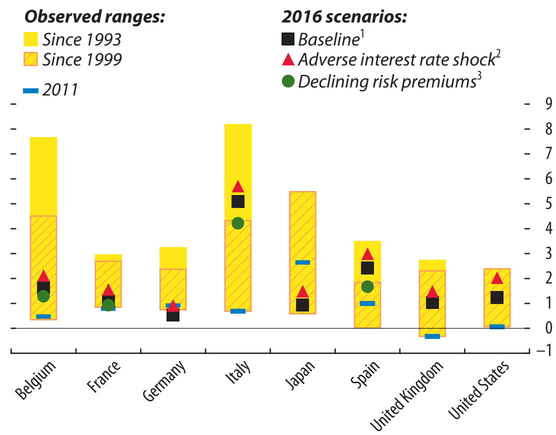
euro area countries to at least adopt a proactive stance in laying out the necessary plans for medium-term fiscal adjustment, Japan and the United States have yet to take that crucial step to safeguard investor confidence (see Annex 2.2). Given the size and importance of both countries' debt markets, this vulnerability remains a latent risk to global stability.

The debt service capacity of countries can be further illuminated by their individual fiscal histories. Italy, for instance, has lived with above-average interest burdens for a long time. To elucidate this aspect, Figure 2.13 shows current and projected interest burdens of selected countries under the three scenarios in relation to their historical experience. Indeed, Italy's projected interest burden in 2016 remains well within the range of past experience; during the 1990s, interest burdens were significantly higher than projected even under the weak policies scenario. It is worth cautioning, however, that those high real interest bills of the 1990s were perhaps made more tolerable by the prospect of qualification for the euro and the associated convergence of interest rates to a lower euro area level. In fact, since the inception of the monetary union (striped area in Figure 2.13), Italy has not had to bear as high an interest burden as is projected for 2016, even in the baseline scenario, and neither has Spain. Thus, there is no denying the worsening headwinds from rising interest rates on sovereign debt for most countries shown in Figure 2.13.

Domestic investors are expected to provide the bulk of gross financing needs in Germany, Italy, and Spain in 2012, but foreign investors still hold a significant portion of outstanding debt stocks (Figure 2.14), despite a steady decline for some countries since 2010. Would domestic investors be able to replace foreign investors if they continued to reduce their share of the outstanding stock? This question can be examined using our three scenarios. Consistent with the nature of the scenarios, we assume a progessively higher reliance on domestic investors the more policies fall short of the comprehensive reform package recommended in this report (see assumptions in Table 2.2).

The additional sovereign bonds that domestic investors would need to purchase to cover the funding needs (under both the complete and current policies scenarios), as well as replace foreign investors (under weak policies) could be quite large (Table 2.3).

Figure 2.13. Scenarios for Ratio of Real Government Interest Expenditure to GDP, Selected Advanced Economies
(In percent)



Sources: Bloomberg L.P.; IMF, World Economic Outlook (WEO) database; and IMF staff estimates.
Note: Data are for real interest expenditures on general government debt. The real rate is the nominal rate less inflation in the consumer price index. Data constraints limit the U.S. historical range to 2001–11.
[1]Based on WEO and market interest rates as of March 13, 2012.
[2]Permanent increase in interest rates by one standard deviation across the curve, starting in 2013.
[3]Permanent 50 percent decline in interest rate spreads relative to bunds, starting in 2013.

Figure 2.14. Foreign Investor Share of Total Sovereign Debt, 2009–11, Selected Euro Area Economies
(In percent)

Sources: Eurostat; IMF-World Bank Quarterly External Debt Statiistics; and IMF staff estimates.

Table 2.2. Share of Foreign Investors in Gross Refinancing Needs of Selected Euro Area Sovereigns under Three Policy Scenarios
(In percent)

	Complete Policies[1]	Current Policies[2]	Weak Policies[3]
Austria	75.7	76.4	77.1
Belgium	64.7	57.5	50.3
France	59.0	59.5	60.0
Germany	50.5	55.5	60.6
Italy	42.0	36.8	31.7
Netherlands	69.3	57.7	46.1
Spain	50.8	38.1	25.5

Source: IMF staff estimates.

[1]Refinancing share equals end-2009 share of total debt stock.

[2]Refinancing share equals end-2011 share of total debt stock.

[3]Refinancing share declines by same amount as decrease from end-2009 to 2011:Q3.

If domestic banks absorbed this additional sovereign debt, it would raise the proportion of their balance sheet devoted to government bonds by as much as 9½ percent of assets (in the case of Italy under the weak policies scenario, Table 2.3). While this may be manageable, the strains placed on domestic investors would be magnified if yields were to rise sharply again and financial institutions suffered fresh losses on their existing holdings.[6] Given these considerations, the increases in domestic funding outlined in these scenarios will require either a significant increase in home bias on the part of domestic investors or some form of financial repression on the part of policymakers. Neither of these two developments would be innocuous, underscoring the importance of decisive steps to restore the confidence of investors that a strong and flexible firewall can be deployed to prevent a repeat of the downward spiral toward a bad equilibrium. The recent decision by euro area policymakers to raise the effective lending capacity of the ESM (through accelerated buildup of capital and temporary backstopping by the EFSF) marks an important step in the right direction.

[6]This additional stress is not incorporated in the scenarios presented above.

Overall, the situation in several euro area sovereign bond markets has improved in recent months but still remains fragile. This has allowed a number of sovereigns to prefund a large share of rollover needs for 2012. The governments of Italy and Spain now finance themselves in the market at lower yields than at the end of 2011, so their marginal funding costs do not pose immediate threats to debt sustainability. However, current fragilities leave bond markets prone to renewed turmoil: negative news or sudden changes in sentiment could quickly drive up yields and further erode the investor base as expectations shift toward a bad equilibrium.

Countries currently facing market pressures therefore need to sustain their resolve to rectify fiscal imbalances that weigh on investor confidence. Across the rest of the euro area, these efforts should be matched by a more resounding message of cohesion and support. Key to assuaging market fears is a sufficiently large financing backstop for countries that are fundamentally solvent but could be threatened by temporary swings of confidence in funding markets.

Bank Deleveraging—Why, What, by How Much, and Where?

Banks have been under pressure to deleverage since the outbreak of the subprime crisis. Pressures on European banks escalated at the end of 2011 as sovereign stress increased and many private funding

Table 2.3. Amount of Additional Funding from Domestic Investors Required by Selected Euro Area Sovereigns under Three Policy Scenarios, 2012

	Billions of Euros			Percentage of Domestic Bank Assets		
	Complete policies	Current policies	Weak policies	Complete policies	Current policies	Weak policies
Austria	7	7	7	0.8	0.8	0.8
Belgium	24	29	34	4.1	4.9	5.8
France	146	144	144	2.4	2.3	2.3
Germany	148	133	118	2.0	1.8	1.6
Italy	205	223	241	8.1	8.8	9.5
Netherlands	30	41	52	1.3	1.7	2.2
Spain	107	135	162	3.1	3.9	4.6

Source: IMF staff estimates.

channels closed. The ECB's provision of longer-term funding has substantially eased the strains, but banks still face the need to raise capital or reduce assets by scaling back credit or cutting business lines. Some of these adjustments are healthy since high leverage is no longer supported—by either markets or regulators—and some activities are no longer viable. However, there is a risk that a large-scale reduction in European bank assets might have serious negative repercussions for the real economy and financial markets in the euro area and beyond.

European bank leverage and reliance on wholesale funding remains high.

Advanced economy banks have been under pressure to reduce leverage since the outbreak of the subprime crisis, as many institutions had entered the crisis with thin capital cushions and a heavy reliance on wholesale funding. However, progress has varied in this adjustment process. While institutions in the United States have reduced their leverage and reliance on wholesale funding, EU banks—in aggregate—remain more reliant on wholesale funding and, though leverage has been reduced, levels remain elevated (Figures 2.15 and 2.16). This has left the European banking system more exposed to structural and cyclical deleveraging pressures.

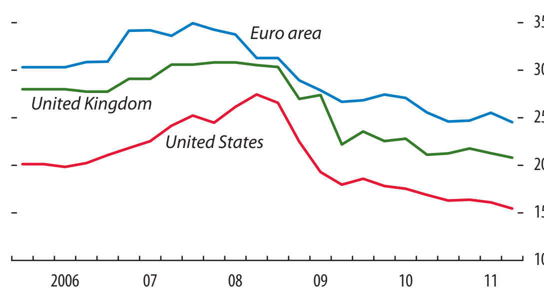
Bank funding strains intensified toward the end of last year.

Toward the end of last year, market pressures on banks intensified significantly as the euro area debt crisis continued to spread and spill over to the banking system.[7] Escalating investor concerns were reflected in weak bank equity prices—as discussed in Box 2.1 and as shown in Figure 2.17—and soaring credit default swap spreads for banks in countries with the most affected sovereigns (Figure 2.18).

Wholesale bank funding markets became particularly strained. Unsecured funding channels closed for many weaker European banks. This was most evident in U.S. dollar funding markets, where U.S.

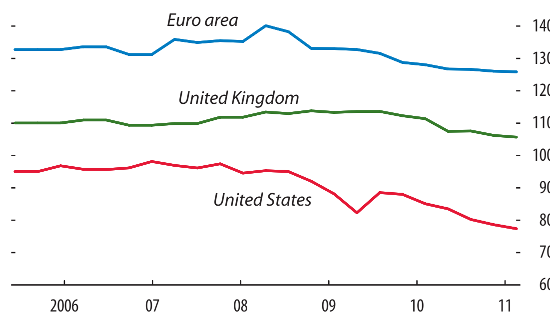
[7]See the September 2011 GFSR for an analysis of sovereign spillovers on the euro area banking system.

Figure 2.15. Bank Leverage
(Adjusted tangible assets to Tier 1 common capital)



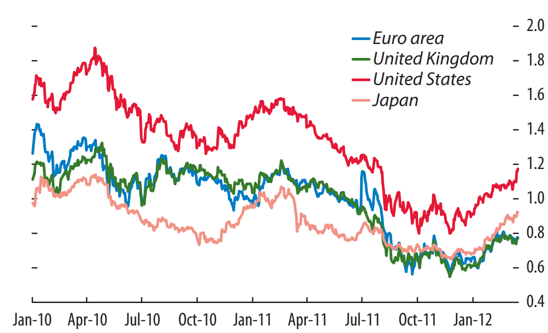
Sources: SNL Financial; and IMF staff estimates.
Note: Tangible assets are adjusted by subtracting derivatives liabilities from tangible assets of European banks. However, some accounting differences may remain. Based on large banks in each economy.

Figure 2.16. Bank Loan-to-Deposit Ratios
(In percent)



Sources: SNL Financial; and IMF staff estimates.
Note: Based on large banks in each economy.

Figure 2.17. Bank Price-to-Tangible Book Value
(Ratio)



Sources: Bloomberg L.P.; and IMF staff estimates.

Box 2.1. What Explains the Performance of European Bank Equities?

An econometric analysis indicates that the weak performance of European bank shares during the financial crisis has been largely due to macro factors, but the strength of individual bank balance sheets has also affected share price performance. The analysis suggests that sovereign stress in the European periphery, and economic growth prospects in the wider euro area, have had pronounced and roughly equal impacts on bank share prices. Higher equity buffers and capital ratios are positively related to equity performance during the second phase of the crisis, vindicating policymakers' efforts to strengthen bank capitalization.

The study is based on a monthly sample of 37 major European banks over the period 2006–11. Panel and simple ordinary least-squares regressions are employed to study the co-movement between bank equity excess returns and measures of sovereign risk, economic activity, market volatility, and funding market conditions.[1] The analysis also incorporates bank-specific variables including Tier 1 capital ratios, leverage, the loan-to-deposit ratio, and the ratio of short-term to total liabilities (Table 2.1.1).[2]

The role of macro variables in explaining bank performance is shown by the pooled cross-sectional regressions for the periods 2006–08 and 2009–11, presented in columns (1) and (2) of Table 2.1.1. The first period includes the U.S. subprime mortgage crisis and the collapse of Lehman Brothers; the second covers the European sovereign debt crisis. The model—containing only macro variables in this version—provides a

Note: Prepared by Jorge Chan-Lau, Estelle Xue Liu, and Jochen Schmittmann.

[1]The sovereign risk variable is constructed as the arithmetic average of the five-year CDS spreads of Belgium, Greece, Ireland, Italy, Portugal, and Spain. Expectations of economic activity are measured by the manufacturing sector purchasing managers' index (PMI), and market volatility is measured by the VIX. Funding market conditions are proxied by two factors: the three-month Euribor-EONIA spread (Euribor-OIS spread) and the option-adjusted spreads (OAS) for Eurobonds issued by global banks. The former is used as an indicator for short-term funding stress, while the latter is used as a measure of long-term funding conditions. All variables are expressed in logarithmic form as changes from the previous month.

[2]The results are robust to variations in the measurement of the variables. For example, similar results are obtained if the loan-to-deposit ratio is replaced by the wholesale funding ratio.

Table 2.1.1. Determinants of Bank Equity Returns

Variable	(1) 2006–08	(2) 2009–11	(3) 2006–08	(4) 2009–11
Change				
Sovereign stress	–0.181***	–0.250***	–0.181***	–0.249***
	(0.017)	(0.033)	(0.017)	(0.031)
European PMI	1.010***	1.946***	0.934***	1.788***
	(0.102)	(0.210)	(0.103)	(0.198)
U.S. PMI	0.215**	–0.805***	0.206**	–0.691***
	(0.091)	(0.186)	(0.092)	(0.174)
VIX	–0.073***	0.023	–0.068***	0.002
	(0.016)	(0.035)	(0.016)	(0.033)
Euribor-OIS spread	0.018***	–0.043**	0.017**	–0.053***
	(0.007)	(0.021)	(0.007)	(0.020)
Euro–bank bond spread	0.037	–0.211***	0.039	–0.197***
	(0.038)	(0.066)	(0.039)	(0.061)
Short-term liabilities/total liabilities			0.005	0.020
			(0.018)	(0.037)
Equity/assets			0.216***	0.294**
			(0.059)	(0.116)
Loans/deposits			0.004	–0.006
			(0.006)	(0.010)
Tier 1 capital/RWA			–0.089	0.475**
			(0.155)	(0.220)
Constant	–0.002	–0.030***	–0.013	–0.068**
	(0.003)	(0.006)	(0.020)	(0.032)
Number of observations	1,207	1,155	1,122	1,120
R-squared	0.362	0.282	0.367	0.313

Note: Standard errors are in parentheses. *** = $p < 0.01$; ** = $p < 0.05$; * = $p < 0.1$. Euribor = euro interbank offered rate. OIS = overnight indexed swap. PMI = purchasing managers' index. RWA = risk-weighted assets. VIX = Chicago Board Options Exchange Market Volatility Index.

Box 2.1. *(continued)*

good fit, explaining 36 percent of the variation in the earlier period, and 28 percent in the latter.

The analysis shows that bank returns are negatively related to sovereign risk, and positively related to changes in euro area activity as measured by the purchasing managers' index (PMI). The estimated elasticity of returns with respect to sovereign risk (0.25) was much lower than that for the PMI (about 2), but given the higher volatility of the sovereign stress measure over the period in question, both variables had roughly the same impact on returns. Over the course of the euro area crisis, the sensitivity of banks to sovereign stress and euro area economic conditions increased.

Of less importance in explaining banks' returns are market volatility (VIX) and funding measures. Market volatility was significantly related to bank returns only in the earlier (2006–08) period, reflecting the dominance of sovereign stress and economic growth prospects in the latter period. Short-term and long-term funding conditions were negatively related to banks' excess returns during the euro area crisis period, reflecting funding stresses.

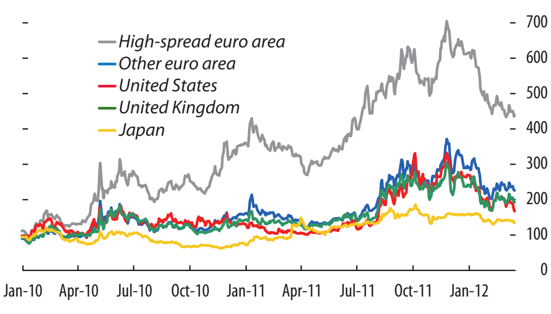
The regressions presented in columns (3) and (4) of Table 2.1.1 provide empirical support for the beneficial effects of stronger bank capitalization on returns. Banks with lower leverage (equity/assets) did better over the entire sample period, and banks with higher Tier 1 capital outperformed other sample banks during the European sovereign crisis.[3] During 2009–11, a 1 percentage point increment in a bank's Tier 1 capital ratio was associated with a premium of about 0.5 percent in monthly excess stock returns.

Banks located in Belgium, Greece, and Ireland were particularly sensitive to changes in economic conditions. The co-movement of bank performance with sovereign risk was strongest in Belgium and Greece and significant for other euro area countries except Ireland. In the case of Ireland, the large guarantees the government gave to its banking sector precipitated the country's sovereign debt crisis, inducing a negative correlation between bank returns and sovereign performance for a period.

Market volatility in the euro area was significant only for banks in France and Germany. Using a larger sample that included banks in Japan, the United Kingdom, and the United States, the study found that British and American banks exhibited sensitivities to European sovereign risk and economic conditions of a magnitude similar to that for core European banks. Japanese banks were least sensitive to European factors, but the coefficients are significant nonetheless.

[3]Panel regressions with bank fixed effects yield very similar results except for the Tier 1 capital ratio, which becomes insignificant.

Figure 2.18. Bank Five-Year Credit Default Swap Spreads
(In basis points)



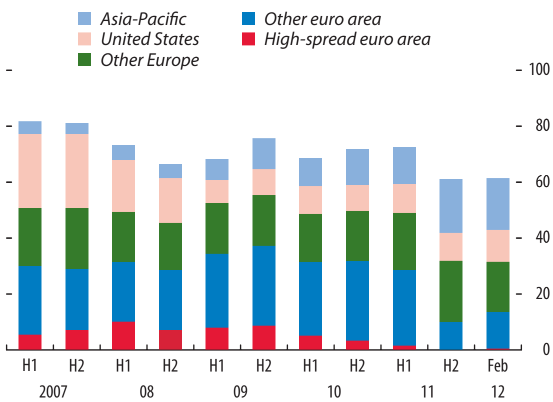
Sources: Bloomberg L.P.; and IMF staff estimates.
Note: High-spread countries are Belgium, Greece, Ireland, Italy, Portugal, and Spain.

prime money market funds sharply reduced their exposure to euro area banks and stopped lending to banks from high-spread euro area countries altogether (Figure 2.19).[8] But strains also appeared in other short-term markets, with counterparties only willing to lend at high rates and at increasingly short maturities. Bank term debt issuance was also impaired through the second half of the year (Figure 2.20).

At the same time, customer deposits—including from nonresidents—fell in banks domiciled in Greece, Ireland, Italy, and Spain (Figure 2.21). This contrasts with increases in deposits in France and Germany. Although the situation appears to have

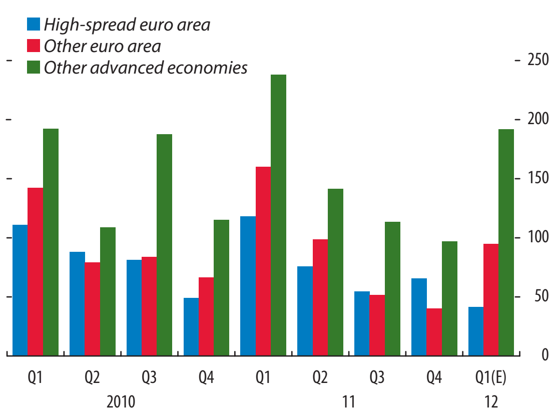
[8]The high-spread euro area countries are the same as those used in the April and September 2011 GFSRs (Belgium, Greece, Ireland, Italy, Portugal, and Spain).

Figure 2.19. U.S. Prime Money Market Fund Exposures to Banks
(In percent of total assets)



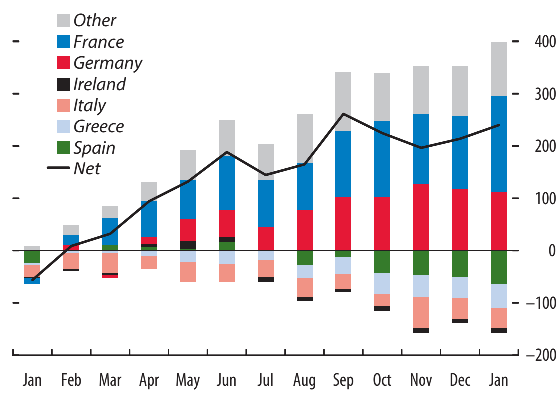
Source: Fitch.
Note: High-spread countries are Belgium, Greece, Ireland, Italy, Portugal, and Spain.

Figure 2.20. Bank Debt Issuance
(In billions of U.S. dollars)



Sources: Dealogic; and IMF staff estimates.
Note: High-spread countries are Belgium, Greece, Ireland, Italy, Portugal, and Spain.

Figure 2.21. Cumulative Euro Area Deposit Flows, 2011–12
(In billions of euros)



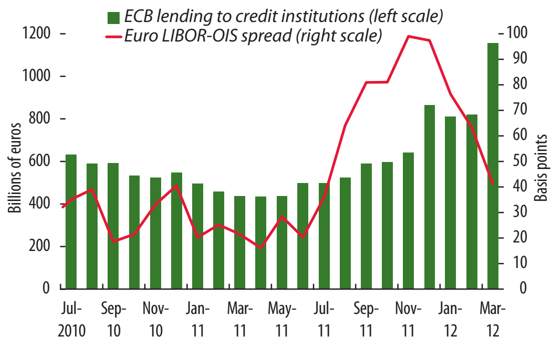
Source: Haver Analytics.
Note: Other includes Austria, Belgium, Finland, Luxembourg, Netherlands, and Portugal.

stabilized at the end of 2011, there is a risk that outflows could resume in 2012 if depositors' perceptions change.

The ECB's longer-term refinancing operations prevented a systemic collapse and reduced funding strains, but conditions are still far from normal.

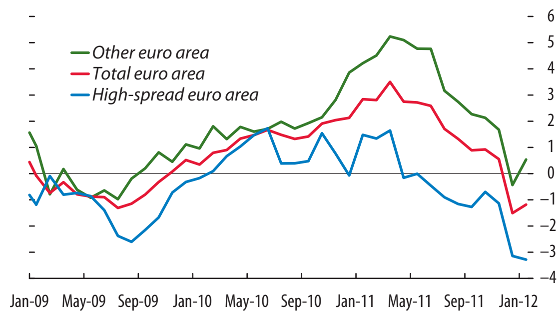
The ECB's decision in December to provide unlimited collateralized loans for up to three years afforded much-needed relief for banks (see Annex 2.4). Since the end of 2011, credit default swap spreads have narrowed by about 180 basis points for banks in high-spread euro area countries. Short-term funding costs have also fallen, with the euro LIBOR-OIS spread about 50 basis points lower. There are also signs that bank funding market conditions are easing, as term debt issuance has risen above the levels of 2011:H2 (Figure 2.20) and U.S. money market fund exposures to core euro area banks have stabilized (Figure 2.19). But market conditions are still far from normal, with indicators of bank credit risk persisting at high levels and with a number of institutions still relying heavily on central bank liquidity support (Figure 2.22). Furthermore, economic conditions have continued to weaken. The difficult economic backdrop will likely lead to lower bank earnings and a deterioration of banks'

Figure 2.22. ECB Liquidity Facilities and Interbank Market Spreads



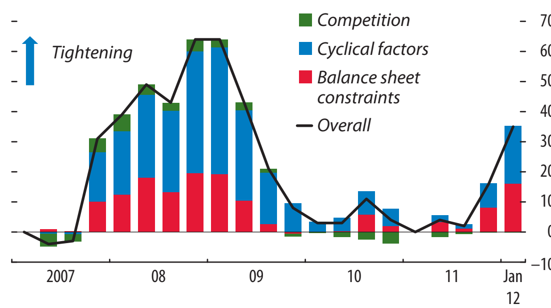
Sources: Bloomberg L.P.; and Haver Analytics.
Note: LIBOR = London interbank offered rate; OIS = overnight indexed swap.

Figure 2.23. Credit Growth to the Nonfinancial Private Sector
(In percent, seasonally adjusted three-month change, annualized)



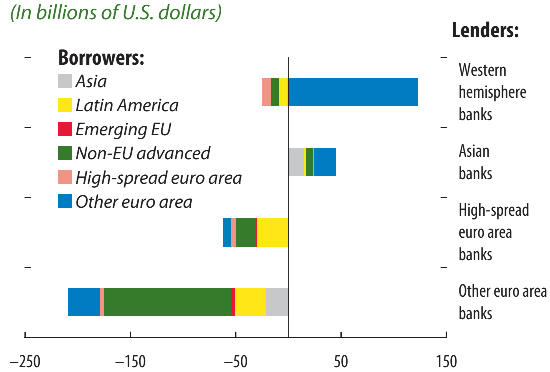
Sources: Haver Analytics; and IMF staff estimates.
Note: High-spread countries are Belgium, Greece, Ireland, Italy, Portugal, and Spain.

Figure 2.24. Contributions to Euro Area Bank Lending Conditions for Companies
(Net percentage balance)



Sources: Haver Analytics; and IMF staff estimates.
Note: The bars show the average proportion of respondents citing the different factors. Balance sheet constraints include capital, access to financing, and liquidity position. Cyclical factors include general economic activity, industry outlook, and collateral needs. The sum of the bars has been adjusted to equal the corresponding overall value.

Figure 2.25. Change in Banks' Foreign Private Sector Claims, 2011:Q3
(In billions of U.S. dollars)



Sources: Bank for International Settlements; and IMF staff estimates.
Note: Data are for BIS reporting banks. Claims on euro area and emerging EU countries are corrected for variation in the dollar-euro exchange rate. High-spread countries are Belgium, Greece, Ireland, Italy, Portugal, and Spain.

asset quality, potentially creating an adverse feedback loop through higher provisioning and capital needs, which could further add to deleveraging pressures.

Against this backdrop, European bank deleveraging appears to have accelerated in the second half of 2011.

Reflecting these market pressures, European bank deleveraging appears to have begun in earnest in the second half of 2011, with some of the asset reductions taking place under official restructuring plans. Euro area bank credit growth to the nonfinancial private sector has also slowed, particularly in high-spread countries where loan growth rates have been diverging from those in other euro area countries (Figure 2.23), though the most recent data show some stabilization in growth rates. Although credit growth may reflect both demand and supply factors, euro area survey results show that banks have tightened their lending standards in response to balance sheet constraints, with cyclical factors also playing a role (Figure 2.24).

In addition, European banks sold assets in some non-EU markets as part of their efforts to rebalance their balance sheets during the third quarter of 2011 (Figure 2.25). High-spread euro area banks, in particular, reduced their private sector claims on Latin America and on advanced countries outside the EU. Banks in other euro area countries scaled back their claims on borrowers in advanced economies outside the EU and in some emerging market economies.

The deleveraging trend is likely to continue and broaden.

Looking ahead, many European banks have announced medium-term business plans with reductions in assets amounting to about $2.0 trillion in total. The size of planned asset reduction tends to be larger for universal banks, institutions that had been taken over by national authorities, and banks that are highly reliant on wholesale and less stable sources of funding (Box 2.2). There are several structural drivers shaping the evolution of European bank balance sheets.

- First, a number of European banks have not yet completed the clean-up of their balance sheets and shedding of legacy assets. Institutions that received government support are required under EU law to sell parts of their business to minimize competitive distortions. Other banks are facing additional national requirements that may lead them to cut back certain activities (for example, the ring-fencing to separate commercial and investment banking activities in the United Kingdom).
- Second, banks are seeking to be better capitalized. Some institutions are raising their capital buffers following the European Banking Authority (EBA) recapitalization exercise. Banks are also reacting to the so-called Basel 2.5 rules, which came into effect early this year, and have reinforced incentives to accelerate the disposal of legacy assets and to reconsider the scale of banks' investment banking activities.
- Third, institutions are seeking to reduce their reliance on less stable (short-term, wholesale) sources of funding. This is, in part, a reaction to the seizing-up of wholesale markets in the aftermath of the Lehman Brothers collapse as well as regulatory norms under Basel III. In Europe, it also reflects increases in the cost of private wholesale funding.

There is a risk that a large-scale reduction in assets by European banks could lead to a credit crunch.

These structural changes are healthy as they will lead, over time, to a stronger and more resilient banking system. However, there is a risk that large, simultaneous asset reduction by a number of European banks could have an adverse impact on the economy and the financial system. In general, deleveraging can be accomplished through increases in capital or a fall in assets, with the exact mix depending on a bank's starting position and on macro-financial conditions. For example, under adverse conditions, banks may find it more difficult to generate capital and therefore could choose to adjust their balance sheets through asset shrinkage. In what follows, the term "deleveraging" will be used to refer to a reduction in assets after taking into account changes in levels of capital.

The potential scale of European bank deleveraging is assessed through simulations of the balance sheet adjustment for a sample of 58 large EU banks, using the same scenarios presented in Chapter 1.[9] The scenarios run from the end of September 2011 to the end of December 2013. In the exercise, bank deleveraging is driven by both structural and cyclical forces. The *structural* forces are: (1) the need to adjust banks' business models (as reflected in the business plans announced by banks), (2) the need to further strengthen capitalization, and (3) the drive to reduce reliance on less stable (short-term, wholesale) sources of funding. The *cyclical* factors include financial conditions—in sovereign and bank funding markets—and the state of the economy, which affects banks' retained earnings. This scenario approach is consistent with the EBA exercise, but takes a broader view of bank deleveraging, as discussed in Box 2.3.

How do banks deleverage?

For each bank, the target amount of asset reduction is determined given its initial condition, projected capital generation, as well as cyclical and structural factors described above. The asset reduction is then implemented according to banks' business plans, if such information is available, or through an assumed deleveraging strategy (see Annex 2.1 for details). This assumed deleveraging strategy is such that not all deleveraging occurs through a reduction in customer lending. Banks first consider selling securities and cutting back part of their interbank exposures before

[9]See Annex 2.1 for more details on the methodology and the list of banks.

Box 2.2. European Banks' Business Plans

Of the 58 EU-based banks that are the focus of the GFSR deleveraging exercise, 24 have announced detailed plans (available on their websites) to sell about $2.0 trillion over the next two years (2011–13) (Figure 2.2.1). These banks are among the largest globally and have tremendous cross-border and cross-business line reach. The banks' business plans are addressing a number of weaknesses that the financial crisis exposed in banks' business models and risk management practices, including (1) excessive reliance on wholesale funding, in particular short-term and cross-currency; (2) weaknesses in market risk measurement and management, especially credit trading and counterparty risk; and (3) low levels of capital and profitability. The following list details the areas that are most affected:

- *Trading within investment banking*. Banks with large investment banking arms are cutting back sharply on trading activities, in particular proprietary trading, nonstandardized derivatives, distressed sovereign exposures, repurchase agreements, and AAA-rated securitized and structured products. These activities have become less profitable and require more capital and liquidity buffers under Basel 2.5 and Basel III. In addition, many banks see this as a way to quickly reduce wholesale funding needs, especially in U.S. dollars.
- *Corporate banking*. Banks are scaling back parts of corporate banking, such as interbank lending,

Figure 2.2.1. EU Banks with Announced Changes to Business Strategy

Source: Company websites; and IMF staff estimates.
[1]Includes interbank lending and commercial real estate loans; and working capital, project, and specialized finance, including leasing, equipment, trade, and commodities finance.
[2]Includes companies that specialize in car, aircraft, shipping, leasing, project, and structured finance; investment banks; and municipal bond agencies.
[3]All EU and non-EU countries in eastern Europe, including Poland, Russia, and Turkey.
[4]Has received government financial support.

Box 2.2. *(continued)*

syndicate loans, factoring, and leasing as well as commodities, project, and trade finance. These activities are wholesale-funding intensive and will require more capital and liquidity under Basel III. One typical example is the decision by some French banks to run off certain businesses in the areas of aviation, commodity, and equipment leasing finance.

- *Retail banking*. A number of banks plan to scale back retail banking through run-offs or loan sales (e.g., commercial real estate), sale of distressed assets (e.g., downgraded structured products), or even sale of bank branches or credit businesses (e.g., the sale of ING Direct to Capital One in 2012:Q1).
- *Nonbank and shadow bank assets*. Universal banks have started selling nonbank financial companies, including in insurance, asset management, securities, finance, and real estate investment. For about 65 percent of the transactions, buyers are regulated financial institutions, such as other commercial banks or insurance companies. Private equity companies and investment companies have bought mainly project loans, structured and distressed assets, real estate management companies, financial services companies, and some investment and private asset management banks (e.g., the sale of Dexia's Bank International and of KBC's KBL to the Qatar investor group Precision). For the largest-value sales, buyers have come largely from the United States and Japan.

they start scaling back their loan portfolio. This assumption reflects: (1) what has happened to date, as a number of European banks have already been selling dollar-denominated securities; (2) banks' publicly announced business plans; and (3) banks' likely reaction to the increase in risk weights under Basel 2.5.

When banks consider reducing their loan books, some home or regional bias is assumed, with institutions expected to consider curtailing their foreign loan books before cutting domestic credit. This bias is visible, to some extent, in the evolution of banks' foreign claims during 2011:Q3 as shown in Figure 2.25. The recently launched "Vienna 2.0" initiative, which aims at establishing mechanisms to avoid disorderly deleveraging in emerging Europe, also suggests that concerns about home bias in the behavior of European banks are real.[10] Finally, in its December 2011 press release on the 2011 EU Capital Exercise, the EBA recommended that bank recapitalization plans should not "lead to significant constraints on the credit flow to the EU real economy."

[10]See "Statement at the Conclusion of the European Bank Coordination 'Vienna 2.0' Initiative's Full Forum," IMF Press Release No. 12/80, March 13, 2012, www.imf.org/external/np/sec/pr/2012/pr1280.htm.

By how much and where?

In the *current policies* scenario, aggregate leverage of the sample banks falls from 29 to 23, with the majority of this decline achieved through retained earnings and the capital raised as part of the EBA exercise (Figure 2.26). The remainder comes through a \$2.6 trillion (€2.0 trillion) reduction in assets, or about a 7 percent decline in total balance sheet size.[11] About one-quarter of the fall in assets occurs through a reduction in loans, with the remainder due to sales of subsidiaries, noncore assets (for example, insurance and asset management arms of banking groups), and securities. The end-2011 results available so far reveal that banks in the sample reduced assets by almost \$580 billion in the last quarter of the year.

The variations in the scale of bank deleveraging across scenarios are mainly driven by differences in the extent of cyclical pressures. Under the *complete policies* scenario—where cyclical pressures ease—assets are cut back by \$2.2 trillion, mostly reflecting banks' own business plans. By contrast, in

[11]This figure may not account for some recent asset sales. The methodology used may also differ from ongoing restructuring programs in certain countries.

Box 2.3. A Comparison of the GFSR Approach with the European Banking Authority's Bank Capital Strengthening Exercise

On December 8, 2011, the European Banking Authority (EBA) recommended a higher core Tier 1 capital (CT1) target of 9 percent and the creation of temporary capital buffers, to be attained by June 30, 2012, to strengthen bank balance sheets (EBA, 2011).[1] The EBA subsequently published an overview of the capital plans that banks had submitted to regulators (EBA, 2012). These plans, in aggregate, more than cover the capital shortfall identified by the EBA. Direct capital measures account for the majority of the plans, with the remainder comprising changes to bank risk weight models, asset disposals, and reductions in lending—mostly corresponding to actions taken under EU State Aid rules.

The December EBA recommendations as well as the bank deleveraging analysis in this GFSR suggest that capital generation is the key factor in strengthening bank balance sheets (as illustrated in Figure 2.26 through the fall in the leverage ratio). Both the EBA and the GFSR analysis also assume that most of the needed cutback in bank assets will come through asset sales rather than through lending.

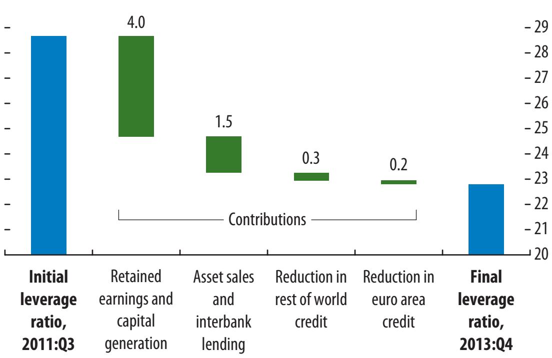
However, the GFSR analysis suggests that banks will reduce assets by $2.6 trillion (in the *current policies* scenario)—a much larger amount than implied by the bank capital plans submitted to the EBA. This distinction arises because the GFSR analysis is fundamentally different from the EBA capital exercise in a number of ways.

- First, the purpose of the EBA exercise is to increase bank capital positions; hence, it is based on a single capital target. The GFSR exercise, however, is driven by a range of structural and cyclical factors. The structural factors include changes to bank business plans (which imply a $2.0 trillion reduction in bank assets, according to the public announcements made by banks); maintaining a 9 percent CT1 capital position; and reducing reliance on less-stable wholesale funding. The cyclical factors include strains in bank funding markets and different degrees of sovereign stress. Indeed, the GFSR analysis finds that the capital target has a limited role in driving bank asset reductions (Figure 2.28).
- Second, the analysis in the GFSR has a *different time frame*, running up to the end of 2013, whereas the EBA exercise concludes in June 2012.
- Third, the results are for a *different set of banks*. Only institutions found by the EBA exercise to have capital shortfalls submitted plans. In contrast, the GFSR exercise applies to all banks in the sample.

Note: Prepared by William Kerry.

[1]Core Tier 1 capital is a subset of Tier 1 capital consisting predominantly of common shares and retained earnings.

Figure 2.26. Contributions to Reduction in Aggregate Bank Leverage Ratio, Current Policies Scenario
(Total assets to core Tier 1 capital)



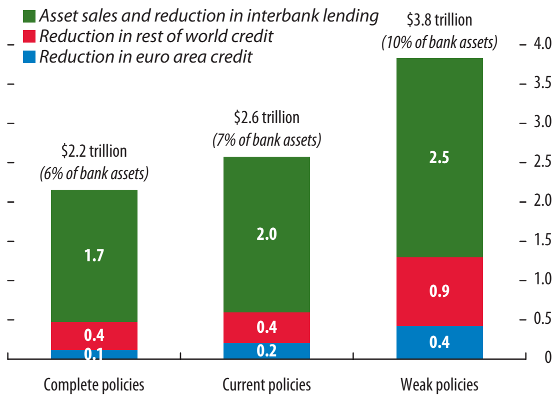
Source: IMF staff estimates.
Note: For a sample of 58 large EU banks. For details, see Annex 2.1.

the *weak policies* scenario—where cyclical pressures are stronger—banks reduce assets by $3.8 trillion (Figure 2.27). As cyclical pressures intensify, the impact on EU credit rises disproportionately. This is because with stronger cyclical headwinds, more banks need to work their way further down the deleveraging pecking order when reducing their balance sheets, and so EU and domestic credit is curtailed more.

The influence of cyclical and structural forces can also be assessed by calculating the incremental contribution of these factors in the three scenarios. Figure 2.28 shows that banks' business plans are a key determinant of the scale of deleveraging.[12] The

[12]As indicated in the figure, the influences are additive: The green bar shows the amount of asset reduction when banks face

Figure 2.27. Contributions to Aggregate Reduction in Bank Assets, Three Policy Scenarios
(In trillions of U.S. dollars)



Source: IMF staff estimates.
Note: For a sample of 58 large EU banks. For details, see Annex 2.1.

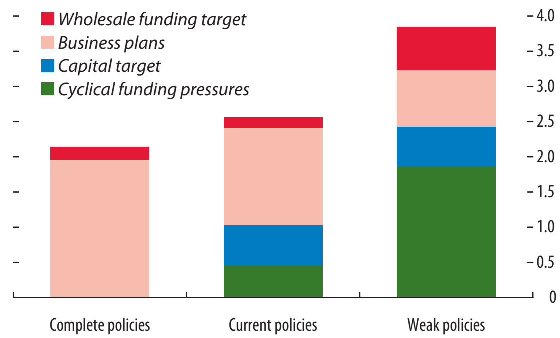
cyclical factors—such as funding pressures—play a much greater role in the *weak policies* scenario than in the other two scenarios. In the *current* and *weak policies* scenarios it is assumed that there are no further LTROs and that the level of other central bank lending remains constant. But if funding conditions deteriorate significantly, central banks are likely to lend more. Although this would alleviate pressures in the short term, large-scale increases in official liquidity support are not ultimately sustainable, as discussed in the September 2011 GFSR.

Across all three scenarios, sample banks cut back lending—in percent of total credit—most significantly in countries in emerging Europe (Figure 2.29). There are also cutbacks in lending in advanced economies—mainly in the European Union and the United States—and in Latin America. Lending to emerging Asia is less affected than to other emerging market regions.

The analysis of deleveraging involves a considerable amount of uncertainty since it includes assumptions about the behavior of banks and is affected by some data gaps. Moreover, the ultimate impact on credit across countries is subject to many other factors. The methodology, however, gives priority to

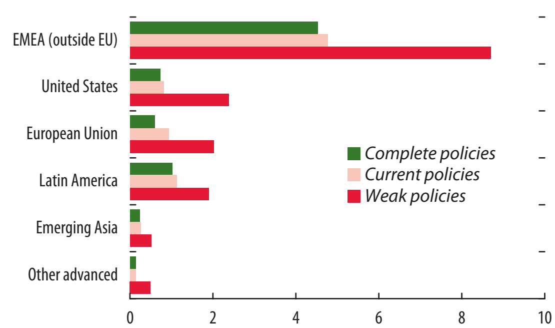
cyclical funding shortages only; the sum of the blue and green bars shows the amount of asset reduction when banks face both capital constraints and cyclical funding shortages, and so on.

Figure 2.28. Factor Contributions to Aggregate Reduction in Bank Assets, Three Policy Scenarios
(In trillions of U.S. dollars)



Source: IMF staff estimates.
Note: Marginal contribution of each factor for a sample of 58 large EU banks. For details, see Annex 2.1.

Figure 2.29. Reduction in Supply of Credit by Sample Banks, Three Policy Scenarios
(In percent of total bank credit)



Source: IMF staff estimates.
Note: Total bank credit includes domestic and direct cross-border credit supplied by banks in each region. EMEA = Europe, Middle East, and Africa. Sample = 58 large EU banks. For details, see Annex 2.1.

other actions by banks for reducing balance sheets before cutting back lending to the real economy. For example: (1) the assumed deleveraging strategy favors sales of assets ahead of cutbacks in lending and thus cushions the effect on credit in all scenarios; moreover, because of the assumed home bias, advanced EU and domestic markets are relatively more protected; (2) foreign lending is protected by the assumption that lending by foreign subsidiaries of sample banks cannot be reduced below the level of local deposits; (3) it is assumed that banks will not take any losses on asset sales, as elaborated below (see Annex 2.1 for details). Figure 2.30 shows the relative importance of financial assets that can be sold to mitigate the impact of deleveraging on bank lending at the different banks in the sample.

What is the impact on credit?

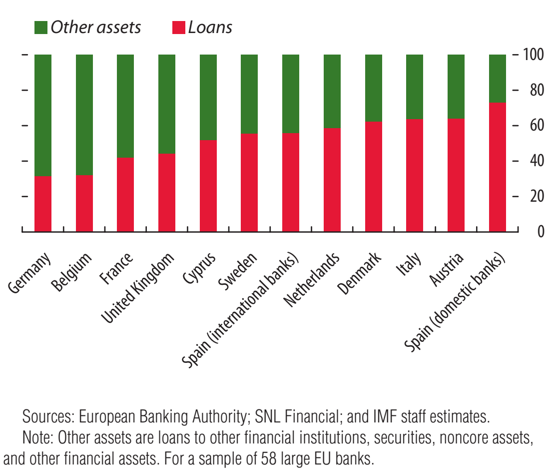
The results for the sample of banks are used to estimate the total impact on euro area credit supply in order to assess potential aggregate effects on the economy. In most cases, this is done by extrapolating the reduction in credit by banks in the sample to banks outside the sample on a country-by-country basis. However, in some cases, where there is clear empirical evidence of diverging credit trends between sample banks and out-of-sample banks, this has been taken into account. The approach suggests a shock to euro area credit supply of 1.7 percent over two years under the *current policies* scenario (Figure 2.31). The credit supply shocks are greater in high-spread euro area countries, with other euro area countries relatively less affected. That said, the decline in credit—after taking into account the second-round effects (from asset sales) on banks and the feedback effects from deterioration in the economy—could be more sizable and could increase if cyclical pressures rose.

The ultimate impact of a simulated pullback in credit by EU banks will depend on a number of country-specific circumstances. First, it will depend on the ability of local banks and other intermediaries to substitute for potentially lower lending by EU banks (for example, local banks may increase lending in response to a decline in competition from EU banks, as is discussed elsewhere in this section). Second, it will also depend on the relative importance of banks as suppliers of credit in the economy (for example, in countries where capital markets play an important role as a source of funding, such as the United States, the impact on the overall supply of credit will be more muted). Finally, the net effect of the credit supply (which is modeled here) on interest rates and on the real economy will depend on the demand for credit.

How does this compare to past financial crises?

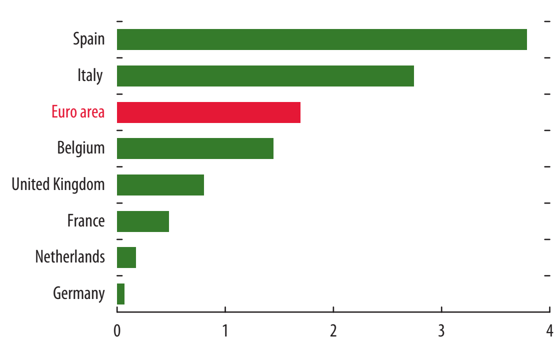
The simulated shocks to euro area credit supply are well within the range of past episodes of deleveraging

Figure 2.30. European Banks: Composition of Assets, 2010
(In percent of assets)



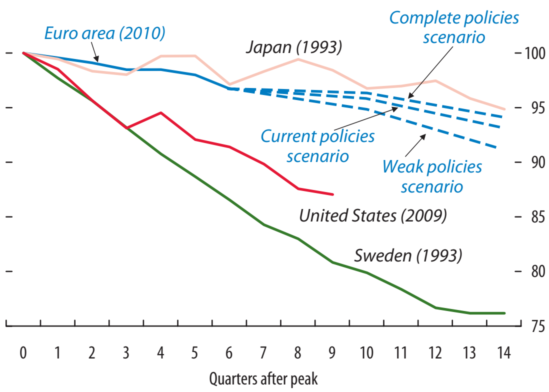
Sources: European Banking Authority; SNL Financial; and IMF staff estimates.
Note: Other assets are loans to other financial institutions, securities, noncore assets, and other financial assets. For a sample of 58 large EU banks.

Figure 2.31. Reduction in Suppy of Credit, by Banking System, Current Policies Scenario
(In percent of total bank credit)



Source: IMF staff estimates.
Note: Data are an extrapolation of results from a sample of banks to the entire banking system. Total bank credit includes domestic and direct cross-border credit supplied by banks in each country.

Figure 2.32. Euro Area Credit Supply Shock: Three Scenarios Relative to Historical Episodes
(Index: Ratio of peak credit to GDP = 100)



Source: IMF, International Financial Statistics and World Economic Outlook (WEO) databases; and IMF staff estimates.
Note: Year given in curve labels is the year of the peak quarter. The scenario lines show simulated paths for the euro area based on an extrapolation of the results from sample banks to the banking system; these lines are drawn using the WEO baseline GDP forecast.

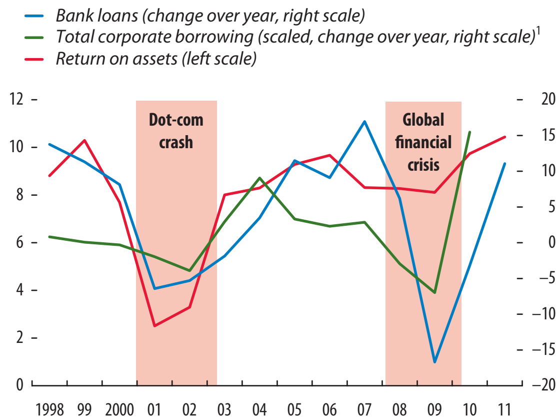
(Figure 2.32). Specifically, the implied decline in the credit-to-GDP ratio under all three scenarios sits between the relatively moderate experience in Japan in the 1990s and the more pronounced credit contraction in the United States in the earlier part of the financial crisis. However, the cutback in credit under the *weak policies* scenario approaches that seen in the United States.

What is the impact on growth?

The impact of these credit supply shocks on economic activity is assessed using the IMF Global Economy Model.[13] The credit shocks implied by the *current policies* scenario are incorporated in the World Economic Outlook (WEO) baseline. The credit shocks in the *complete policies* scenario imply that euro area real GDP would be 0.6 percent above the baseline after two years, consistent with assumptions under the WEO upside scenario. The *weak policies* scenario, in turn, suggests that euro area real GDP would be 1.4 percent lower than the baseline at the end of 2013. This is one of the key elements in one of the WEO downside scenarios.

[13]The Global Economy Model was presented in the July 2008 special issue of *IMF Staff Papers*, Vol. 55, No. 2.

Figure 2.33. United States: Nonfinancial Corporate Borrowing and Return on Assets
(In percent)



Sources: Federal Reserve; Haver Analytics; IMF, Corporate Vulnerability Utility database; and IMF staff estimates.
[1]Annual borrowing scaled down by a factor of 20.

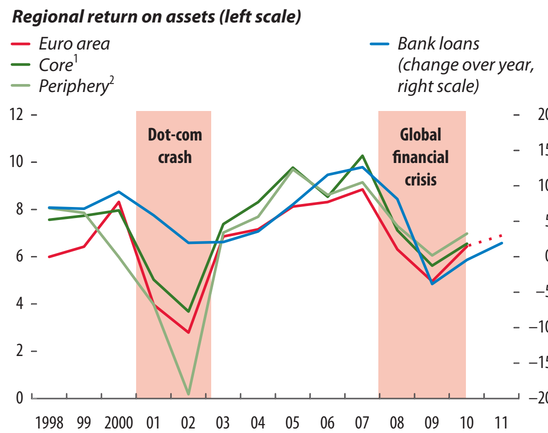
The looming cutbacks in credit could test the resilience of Europe's corporate sector.

Although the effects of European bank deleveraging are likely to be felt far and wide, experience from earlier stages of the financial crisis suggests that credit to Europe's corporate sector is likely to prove a particular pressure point. As banks began to tighten lending standards in 2007–08, all firms suffered. Yet, U.S. firms generally showed greater resilience to the credit shock than did their European counterparts, as their return on assets fell by less and rebounded to precrisis levels by 2011 (Figure 2.33). In comparison, the return on assets for both core and peripheral euro area firms was hit harder in 2009 and has yet to return to precrisis levels (Figure 2.34).

Euro area firms are particularly vulnerable to reduction in bank credit because of their greater reliance on banks for funding and often limited ability to adjust labor costs, at least compared with their U.S. peers (Figure 2.35).[14] Because domestic banks

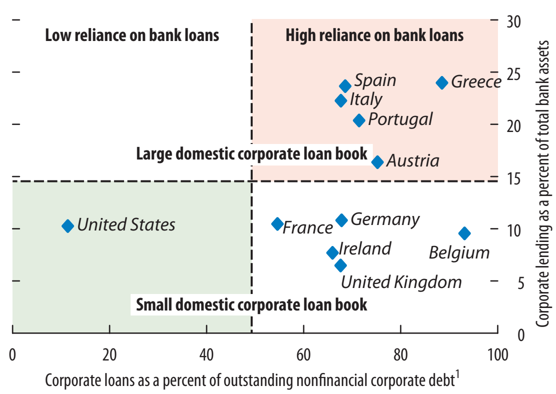
[14]In the World Economic Forum's competitiveness ranking of 142 countries in 2011, Spain (119), Portugal (122), Italy (123), and Greece (126) are included in the bottom 16 percent of countries for labor market efficiency. Those four countries are also ranked well below core euro area countries in goods market efficiency (WEF, 2011, pp. 20–21). See also the European Commission's *Quarterly Report on the Euro Area*, December 2010 and

Figure 2.34. Euro Area: Nonfinancial Corporate Borrowing and Return on Assets
(In percent)



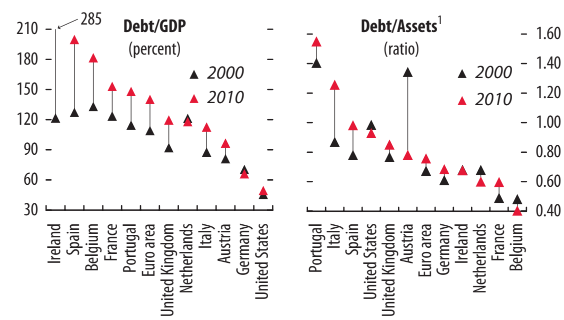
Sources: European Central Bank; Eurostat; Haver Analytics; IMF, Corporate Vulnerability Utility database; and IMF staff estimates.
[1]Core = Austria, Belgium, Finland, France, Germany, and Netherlands.
[2]Periphery = Greece, Ireland, Italy, Portugal, and Spain.

Figure 2.35. Reliance on Bank Financing by Nonfinancial Corporations
(In percent)



Sources: European Central Bank; Eurostat; Federal Reserve; Haver analytics; and IMF staff estimates.

Figure 2.36. Change in Nonfinancial Corporate Debt, 2000–10



Sources: European Central Bank; Eurostat; and Haver Analytics.
Note: Data are as of year-end. Total nonfinancial corporate debt is calculated as sum of loans, securities other than shares, and other accounts payable. GDP is annualized, and seasonally and working-day adjusted.
[1]Assets are Financial Assets, as published by the European Central Bank.

in peripheral economies are facing the greatest deleveraging pressures and have disproportionately large corporate loan portfolios, the potential impact on corporate financing may be especially pronounced there. Small and medium-sized enterprises (SMEs) are likely to be most affected. Even where credit is maintained, corporate borrowers could face elevated borrowing costs, as loan margins are on average 100 basis points higher across the rating spectrum since 2007.[15]

High debt burdens and weak profitability weigh on enterprises, suggesting further credit downgrades and lower bank asset quality.

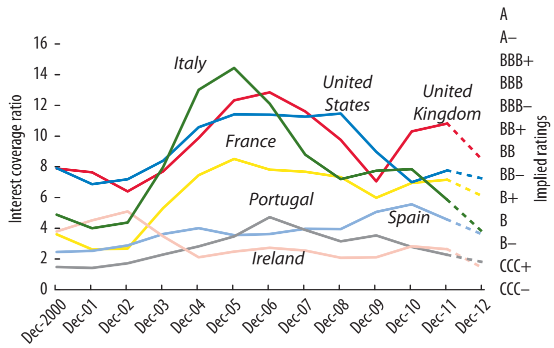
In some cases, strains arising from reduced credit supply are compounded by weaknesses in the corporate sector. Some peripheral euro area nonfinancial firms, for instance, feature comparatively high levels of debt and leverage (Figure 2.36). Servicing high debt levels with deteriorating earnings will leave some companies increasingly fragile in the face of a protracted downturn in the business cycle.

Declining interest coverage ratios indicate the strained borrowing capacity and higher solvency

July 2011, http://ec.europa.eu/economy_finance/publications/qr_euro_area/index_en.htm.

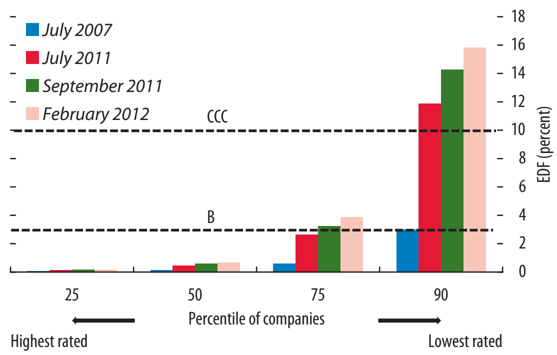
[15]Based on Dealogic data for corporate syndicated loan issuance in Europe, Japan, and the United States.

Figure 2.37. Nonfinancial Corporations: Interest Coverage Ratio and Implied Ratings
(Ratio, left scale, in percent)



Sources: Bloomberg L.P.; and IMF staff estimates.
Note: Dashed lines are projections. Interest coverage ratio is earnings before interest and taxes divided by interest expense. The implied ratings are from a sample of more than 800 U.S. firms that constitute the benchmark high-grade and high-yield corporate bond indices.

Figure 2.38. Corporate Credit Quality in Western Europe, 2007–12
(In percent)



Source: Moody's KMV.
Note: EDF = expected default frequency. EDF is a market-based credit measure that represents the probability that a firm will default within one year. The dotted lines show implied credit ratings associated with particular EDFs. Western Europe comprises the euro area, Denmark, Norway, Sweden, Switzerland, and the United Kingdom.

risks for these firms.[16] Assuming a credit crunch of the magnitude that would ensue under a severe downturn, large corporations could see their interest coverage ratios fall (Figure 2.37).[17] In turn, the deterioration in corporate credit quality would further weaken bank asset quality (Figure 2.38).

Potential spillovers through asset and derivatives markets could be significant.

While potential negative spillovers from the asset sales are not quantified here, their importance has to be acknowledged. A number of banks seeking to sell assets at scale simultaneously could lead to a fall in asset prices, which may—in turn—induce mark-to-market losses for other investors holding similar assets. There is also a risk of an adverse dynamic developing between asset market and funding market liquidity. Poor liquidity in asset markets would mean that greater discounts need to be taken on sales of assets. The subsequent fall in bank capital would mean that banks need to reduce balance sheets further, which could entail further asset sales or a cutback in interbank lending. The latter would generate funding shortages for other banks, that would then need to sell assets or reduce interbank lending themselves, reinforcing the adverse dynamic.

Derivatives markets could also transmit shocks affecting European banks and sovereigns to U.S. banks through both direct and indirect channels. Indirect channels, which have affected U.S. banks the most during the current crisis, arise from the interaction between counterparty risk, reliance on market funding, and the use of hedging strategies. Direct channels arise from potential losses to U.S. banks' holdings of derivative claims on European counterparties. Data disclosures are not sufficient to assess the exposures adequately, a factor that has contributed to the volatility of CDS spreads and equity prices of U.S. banks (see Box 2.4 for details). Even though net exposures might be small, large gross positions expose banks to large swings in the market value of their derivatives holdings, making them vulnerable to margin calls and raising the

[16]The interest coverage ratio is defined as the ratio of EBIT (earnings before interest and taxes) to interest expenses.
[17]We use a sample of publicly traded nonfinancial corporations that are constituents of major stock indices in the respective countries. For example, for the United States we use all the nonfinancial members of the S&P 500 stock index for estimating the market-capitalization-weighted interest coverage ratio for the corporate sector.
Assuming that (1) firms face a credit crunch in 2012 similar to that seen in 2008–09, (2) EBIT falls by a magnitude similar to that in 2008–09 for the respective countries, and (3) interest expense remains stable, we estimate the change in interest coverage ratios for a sample of publicly traded firms in the given countries and map these levels to their respective implied ratings.

Box 2.4. How Derivatives Markets Link U.S. Banks and European Counterparties

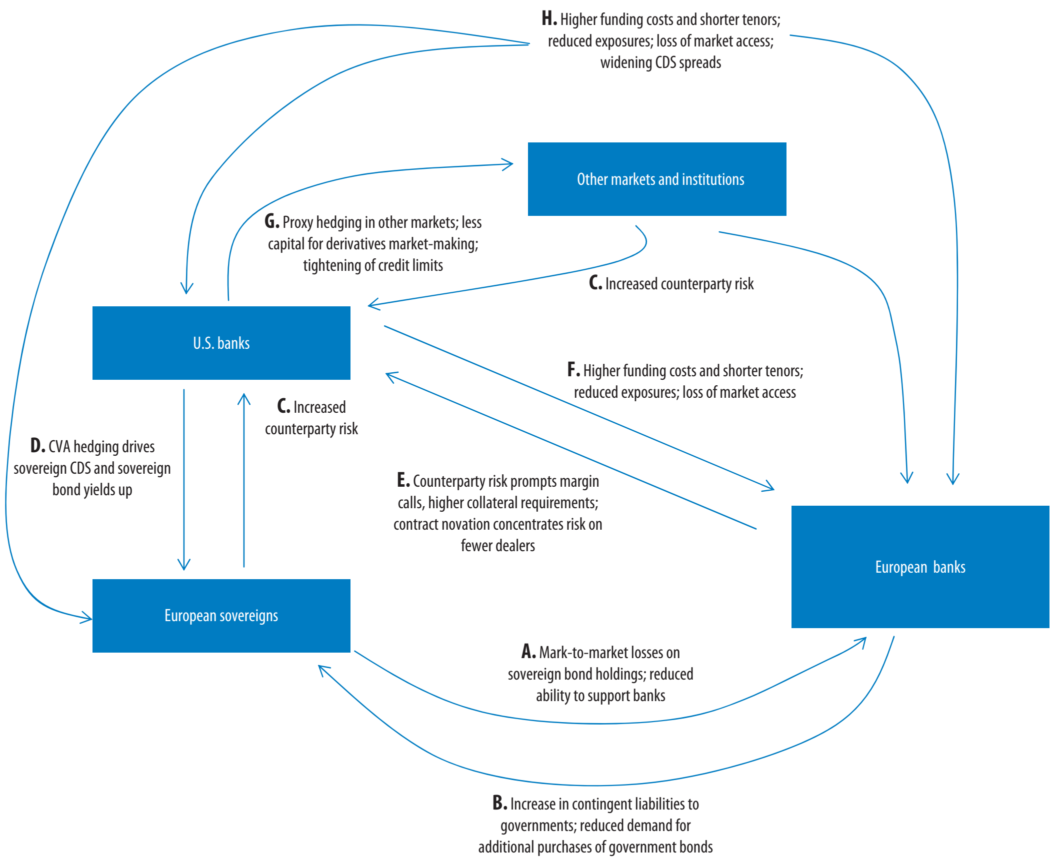
Shocks affecting European banks and sovereigns are transmitted and amplified to U.S. banks by derivatives markets through indirect and direct channels. The indirect channels arise from feedback loops generated by the interactions among counterparty risk, market funding, and the use of hedging strategies. These indirect channels have affected U.S. banks the most during the current crisis, with stresses feeding back and forth between them and European counterparties. Direct channels arise from potential losses to U.S. banks' holdings of derivatives claims on European counterparties. These holdings appear small on a net basis, but data disclosures are not sufficient to assess the exposures adequately, which has contributed to the volatility of CDS spreads and equity prices of U.S. banks.

Derivatives markets increase the interconnections among banks, sovereigns, and other markets and institutions, contributing to the transmission and amplification of shocks. As shown in Figure 2.4.1, a negative European sovereign risk shock could trigger a negative feedback loop affecting European banks, U.S. banks, and other markets and institutions.

A negative feedback loop could start with a widening of European sovereign yields owing to an increase in sovereign risk. European banks holding European government debt suffer mark-to-market losses, and

Note: Prepared by Jorge A. Chan-Lau.

Figure 2.4.1. Market Linkages



Note: CDS = credit default swaps. CVA = credit valuation adjustment.

Box 2.4. *(continued)*

the deterioration of their balance sheet increases their default risk (Figure 2.4.1, link A), leading to higher funding costs (link F). If the European bank has entered into derivatives contracts with a U.S. bank, it would be forced to post higher collateral (link E). Because derivatives markets are opaque, counterparties to the U.S. bank may have difficulties assessing its real exposure to the European bank. Thus, the U.S. bank could face higher funding costs and experience a widening of its CDS spreads on the market perception that its default risk has increased due to its exposure to the European bank (link H). The U.S. bank may reduce its exposure by assigning the derivatives contract to a different derivatives dealer in exchange for a fee—that is, by novating the contract (link E). Novation could concentrate risk among fewer dealers and thereby increase systemic risk in the derivatives market. The U.S. bank can also choose to hedge the risk of the European bank with market instruments, such as CDS protection or long put options purchased from other banks and institutions (link G).[1]

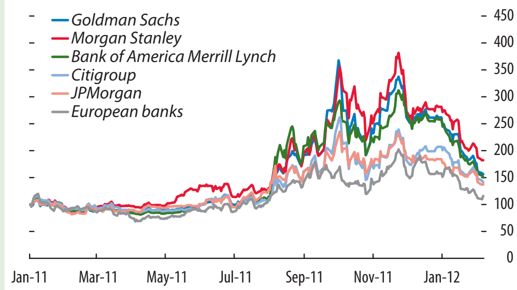
The potential of negative feedback loops to affect U.S. banks is real, as illustrated by events in the second half of 2011. As concerns about the solvency and liquidity of European banks mounted, the spotlight turned to U.S. broker-dealers. Market participants erred on the side of caution by reducing or hedging their exposures to U.S. broker-dealers. As a result, the price of default protection for U.S. broker-dealers widened faster than that of European banks in September 2011, demonstrating how interconnectedness could rapidly evolve into systemic risk (Figure 2.4.2).

Furthermore, spillovers flow in both directions, as U.S. bank actions could negatively affect European counterparties. Credit risk in derivatives contracts is managed by requiring the counterparty to post collateral, but sovereigns are not required to do so.[2]

[1]For details, see for example Blundell-Wignall (2012) and Chan-Lau (2008).

[2]When a bank enters a derivatives contract with a counterparty, it is exposed to credit risk arising from the failure of the latter to perform on the contract. The credit valuation adjustment (CVA) is the market value of the credit risk in the derivatives contract (Canabarro and Duffie, 2003; Pykhtin and Zhu, 2007).

Figure 2.4.2. Relative Price of Default Protection for Selected U.S. Banks and European Banking Sector
(January 3, 2011 = 100)



Sources: Bloomberg L.P.; and IMF staff estimates.

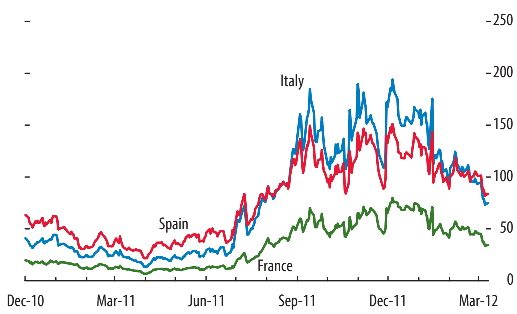
When dealing with sovereigns, banks hedge the credit risk by purchasing sovereign CDS protection, contributing to widening CDS spreads that lead to further rounds of hedging—a cycle referred to as the CVA feedback loop or CDS doom loop. For example, a fixed-rate receiver 10-year euro swap with Italy would have cost a dealer bank a CVA charge of 20 basis points in August 2010 but more than eight times as much, about 170 basis points, in November 2011, at the height of the European sovereign debt crisis (Figure 2.4.3). Similarly, the CVA increased sharply, to 130 basis points if the counterparty was Spain, and 60 basis points for France. The rapid increase of the CVA charges required a substantial increase in protection buying, which contributed to higher European sovereign CDS spreads. In addition, CVA desks also hedge by trading swaptions, leading to increased volatility in the swaption market.[3]

The stress episodes experienced in 2011:H2 suggest that data on direct derivatives exposures may underestimate the impact of spillovers from derivatives markets on U.S. banks. At end-2011:Q3, direct European derivatives exposures, measured on a fair-value basis and excluding credit derivatives, were small,

[3]Reportedly, the European Capital Requirement Regulation (CRR) and Directive (CRD) will not require banks to hold capital against CVA generated by trades with nonfinancial counterparties, which could help break the CDS doom loop (Cameron, 2012).

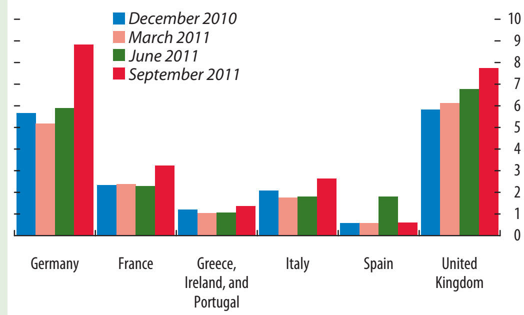
Box 2.4. *(continued)*

Figure 2.4.3. CVA on 10-Year Euro Swaps with a Sovereign Counterparty: France, Italy, and Spain
(In basis points)



Sources: Bloomberg L.P.; and IMF staff estimates.
Note: CVA = credit valuation adjustments.

Figure 2.4.4. Derivatives Exposures of U.S. Banks to Selected Euro Area Countries, All Counterparties
(In percent of Tier 1 capital)



Source: U.S. Federal Financial Institutions Examination Council.

amounting to 34 percent of the Tier 1 capital of U.S. banks, and concentrated mainly on Germany, France, and the United Kingdom (Figure 2.4.4).[4] Exposure to any single individual country did not exceed 10 percent of Tier 1 capital, and total exposure to peripheral countries was about 5 percent. Because official data on net credit derivatives exposures is not available, the best guidance is offered by data released in the banks' quarterly and annual reports, which suggest low exposures. The two stress episodes described above, however, illustrate that direct exposures are not all that matters and that substantial data gaps remain.

[4]Fair-value exposures do not account for mitigating factors such as netting and the use of collateral; and they neglect potential future exposure, which could be important. Data consistency may be affected by the different reporting criteria used across banks. Credit derivatives and guarantees reported in the lending survey of the U.S. Federal Financial Institutions Examination Council are on a notional basis, which prevents use of the data for risk assessment.

potential for destabilizing fire sales of assets, a risk further compounded by the current scarcity of collateral. Since derivatives market making is concentrated among few broker-dealers, there is the potential for a failure cascade once a dealer fails.

Among the 19 U.S. bank holding companies (BHCs) that participated in the Federal Reserve's early 2012 stress test, six were BHCs with large trading, private equity, and derivatives activities; for those six, the stress scenario was augmented with a global financial market shock that included a severe recession and financial market turmoil in Europe (BGFRS, 2012b). While it is difficult to single out the incremental impact of the assumed strains in Europe, the overall results of the stress tests suggest general resilience of the U.S. banks' capital structure to severe negative shocks.

Emerging Markets—Still Resilient?

Emerging markets have deftly navigated the financial shocks and economic spillovers from advanced economies. The impact of European bank deleveraging has been manageable so far, but there is a risk of a further pullback of bank credit and cross-border lending. Emerging Europe appears most vulnerable in this respect, although banks elsewhere are likely to step in and fill the gap, at least under the current policies scenario. Meanwhile, portfolio flows to emerging markets remain prone to sudden swings in global sentiment; they have rebounded sharply this year but could reverse again in a weak policies scenario. While emerging markets generally have substantial buffers and adequate policy room, homegrown vulnerabilities

in some economies could magnify the impact of external shocks.

Emerging markets have generally fared better than the advanced economies over the course of the global financial crisis, maintaining positive growth rates, good macroeconomic fundamentals, and financial stability. Most have shown resilience in the face of deleveraging pressures. Their relative strength has underpinned a secular trend of capital inflows, albeit one interrupted by occasional sharp reversals whenever global risk aversion spikes. This section assesses the vulnerability of emerging markets to fresh spillovers from Europe, takes account of their homegrown vulnerabilities, and measures these risks against their policy buffers.

Overall, emerging markets are likely to continue doing well, but their resilience could be tested under a *weak policies* scenario that would accelerate European bank deleveraging and might prompt fresh portfolio outflows. Countries in emerging Europe are particularly exposed in this regard. Meanwhile, most emerging markets have policy space to counter adverse shocks, although the scope for easing credit policy is more limited where economies are already in the advanced stages of the credit cycle.

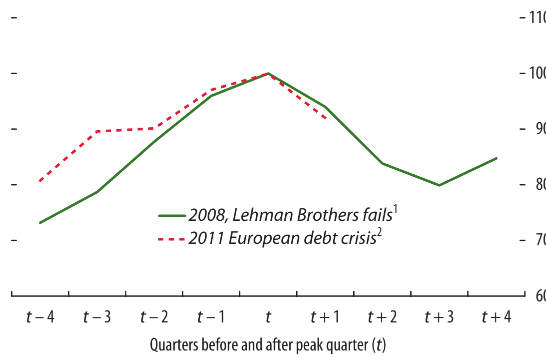
How big are the headwinds from euro area bank deleveraging?

The size of potential spillovers from the wave of deleveraging by euro area banks is illustrated under our policy scenarios. The impact is likely to differ significantly across regions, with larger effects expected in emerging Europe than in Asia or Latin America (see previous section—Figure 2.29). If the current episode were to follow the pattern of the post-Lehman crisis—when euro area banks reduced their credit to emerging markets by a cumulative 20 percent through end-2009—the deleveraging drive could run for several quarters, bottoming out in mid-2012 (Figure 2.39).

There are, however, two key differences with the Lehman episode. First, deleveraging pressures today are largely confined to euro area banks. Other banks are therefore in a better position to step in and cushion the impact on overall credit provision, at least

Figure 2.39. Euro Area Bank Deleveraging in Emerging Markets, 2008 and 2011

(Cross-border claims of BIS reporting banks, peak = 100)



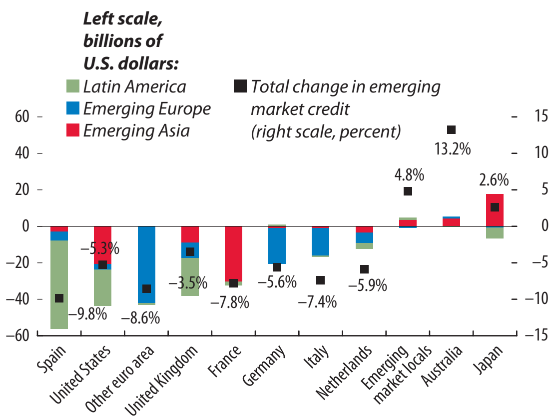
Sources: Bank for International Settlements (BIS), Consolidated Banking Statistics; and IMF staff estimates.
[1]Peak = 2008:Q2.
[2]Peak = 2011:Q2.

under the *current policies* scenario. Looking at developments during 2011:H2, it is true that the cutbacks in emerging market exposures were broad-based, as the negative impact of the euro area crisis on global bank funding costs, growth, and risk appetite affected banks in general. Yet, non-euro-area banks reduced credit to emerging markets more gradually (contracting by 2 percent in the third quarter) than to their euro area peers (a contraction of 8 percent), and after a rapid earlier expansion through mid-2011 (Figure 2.40). Moreover, the recent stabilization of markets has reportedly allowed local and regional banks in Asia and Latin America to step in where voids have been left by European banks in some lending segments (Figure 2.41). By contrast, a smooth handover would appear more challenging in emerging Europe, given the large market share of euro area banks. The potential downside risks in a *weak policies* scenario are explored below.

A second important difference from 2008–09 is that some of the factors driving the current deleveraging trend are structural in nature and thus likely to persist for a longer period. As detailed in the section on bank deleveraging, euro area banks are under regulatory and market pressures to move to a more robust funding model with less reliance on wholesale markets. This shift could permanently reduce their presence in countries where they lack a deposit base. This is especially true for euro area banks' business

Figure 2.40. Deleveraging in Emerging Markets by Selected Advanced Economy and EM Local Banks, 2011:Q3

(Cross-border claims of BIS reporting banks)

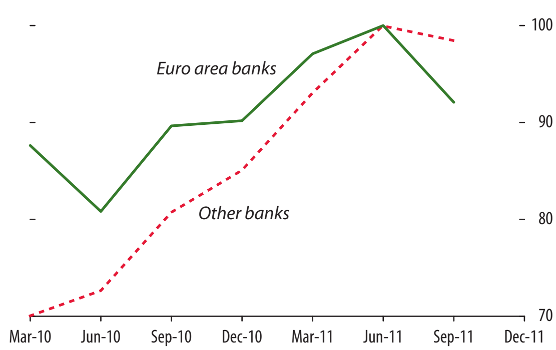


Sources: Bank for International Settlements (BIS), Consolidated Banking Statistics; and IMF staff estimates.

Note: Emerging Asia includes East Asia (excluding Japan) and South Asia. Emerging market (EM) local banks are BIS reporting banks in Brazil, Chile, Mexico, Panama, Taiwan Province of China, and Turkey.

Figure 2.41. Emerging Market Credit Cycle for Euro Area Banks and Other Banks, 2010–11

(Index, peak = 100)



Sources: Bank for International Settlements, Consolidated Banking Statistics; and IMF staff estimates.

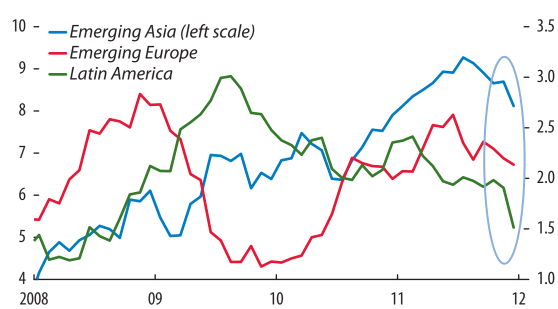
in Asia, whereas operations in emerging Europe and Latin America tend to involve large deposit franchises.

The recent experience also shows that pressures may be concentrated in specialty finance lines (Figure 2.42). Project finance and longer-term structured credit in fields such as aircraft and shipping appear particularly vulnerable owing to special characteristics, including long maturities, heavy use of syndication, and dependence on term dollar funding. During the recent episode of market stress, new lending in these segments fell sharply across emerging markets as longer-term dollar funding markets came under significant pressure. Euro area banks, now faced with deleveraging pressures, have traditionally played leading roles in these markets, although their share has been falling steadily since the 2008–09 crisis. Under the *current policies scenario*, such adjustments are likely to proceed in a smooth and orderly fashion. However, the recent episode also suggests that market strains could reemerge quickly under a *weak policies* scenario.

In comparison with longer-term structured and project finance, short-term trade finance proved remarkably resilient during the latest episode of market stress. Euro area banks are also notable lenders in this segment, but where they curtailed exposures, banks from other regions were able to step in with relative ease, reflecting the standardized form, short maturity, and comparatively low credit risk of trade finance. Euro area banks reportedly maintained trade

Figure 2.42. Long-Term Specialty Finance in Emerging Markets

(In billions of U.S. dollars, 12-month moving average)



Sources: Dealogic; and IMF staff estimates.

Note: Covers medium-term and structured finance and project finance. Emerging Asia includes East Asia (excluding Japan) and South Asia. Oval covers recent period of market stress.

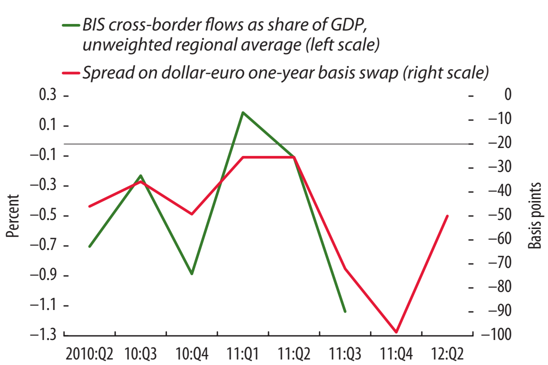
credit for established clients but otherwise pursued a restrictive credit policy. Overall, trade finance appears to have repriced somewhat, reflecting the rise in U.S. dollar funding costs and some tightening in the aggregate supply of credit.

Among emerging markets, emerging Europe is the most vulnerable to euro area bank deleveraging.

Emerging Europe has by far the largest economic exposure to a slowdown in euro area economic activity, the strongest banking links to the euro area, and the largest gross external financing needs. At the same time, potential policy buffers, such as international reserves or fiscal space, are smaller than in Asia or Latin America, and in many instances more limited than they were in 2008.

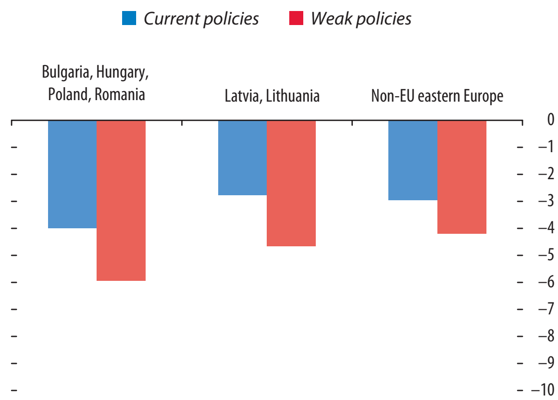
As sovereign and bank funding strains in the euro area intensified during the second half of 2011, parent banks' cross-border financing of operations in emerging Europe declined (Figure 2.43). Looking ahead, parent banks will likely grow their loan books in the region very modestly owing to funding and capital pressures, implying that overall credit growth in more vulnerable countries may be flat or negative. Credit standards have tightened considerably, while counterparty concerns have spilled over from the euro area; the resulting unsecured interbank rates are unusually high relative to policy rates and feed into higher lending rates for clients.

Figure 2.43. Emerging Europe: Cross-Border Bank Flows and Foreign Exchange Funding Costs



Sources: Bank for International Settlements (BIS); Bloomberg L.P.; and IMF staff estimates.
Note: Sample includes Bulgaria, Croatia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Turkey, and Ukraine.

Figure 2.44. Reduction in Supply of Credit by Sample Banks to Emerging Europe: Current and Weak Policies Scenarios
(In percent of total domestic private credit)



Source: IMF staff estimates.
Note: For a sample of 58 large EU banks.

Under the *current policies* scenario, deleveraging by EU banks in the sample would amount to about 4 percent of total private credit in emerging EU member countries in the period 2012–13, with a smaller impact in the Baltic countries, where Nordic parent banks are under less pressure to deleverage (Figure 2.44). EU bank deleveraging would have a more modest impact of about 3 percent on domestic credit in non-EU countries in the region, such as Russia and Turkey.[18] Credit segments most at risk of deleveraging include loans to municipalities and SMEs, as these loans generate less cross-sales and fee-based revenue. Some parent banks are also looking to sell certain operations in the region, although this process has so far been hindered by a scarcity of willing buyers.

A re-intensification of strains in the euro area could have a severe impact on emerging European banking systems, foreign exchange funding, and sovereign debt markets.

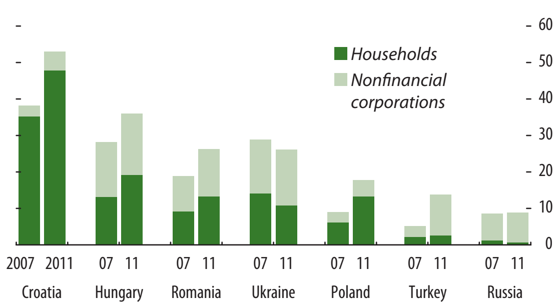
Under the *weak* policies scenario, deleveraging by EU banks would have a more severe impact on lending

[18]However, the estimated impact on non-EU countries in emerging Europe is biased downward by the fact that the sample does not include Greek banks, which have a significant presence in non-EU countries in the Balkans.

by banks in emerging Europe. With parent banks assumed to prioritize domestic lending while shoring up the capital base, repatriation flows could become significant. In this scenario, deleveraging by EU banks in the sample would amount to approximately 6 percent of total private credit in emerging EU member countries over the period 2012–13, whereas the impact in non-EU countries in the region would amount to about 4 percent of total private credit. In southeastern Europe, where Greek banks have a large market share in many countries, spillover and contagion risks need to be closely monitored, with contingency plans in place to contain any potential shocks to confidence in local banking systems.

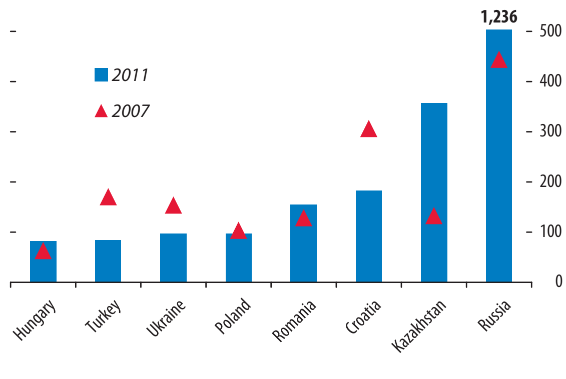
In many countries in emerging Europe, foreign currency loans have risen as a share of GDP since the start of the global financial crisis (Figure 2.45). When such shares are large, private sector balance sheets are vulnerable to currency depreciation, limiting the scope for monetary policy to mitigate potential negative shocks emanating from the euro area. In central Europe, where banks are dependent on foreign exchange swap markets to fund their hard-currency loan portfolios, a sharp global risk retrenchment could cause the private foreign exchange swap market to dry up again, potentially creating dislocations in currency and local interest rate markets, pressuring central bank reserves, and triggering a wave of accelerated deleveraging. In Turkey, where a large current account deficit has increasingly been financed by short-term cross-border bank flows (Table 2.4), and where the stock of international

Figure 2.45. Loans Denominated in Foreign Currency as a Share of GDP, Selected Countries in Emerging Europe, 2007 and 2011
(In percent)



Source: IMF staff estimates.

Figure 2.46. Emerging Europe: Reserve Coverage of Short-Term External Debt, Selected Countries, 2007 and 2011
(In percent)



Sources: IMF, World Economic Outlook database.

reserves is relatively limited (Figure 2.46), a change in the willingness of global banks to roll over loans could trigger currency depreciation and a potentially rapid adjustment of domestic imbalances.

Across the region, the share of local currency government debt held by foreign investors has grown rapidly over the past few years. The domestic investor base—including banks as well as pension and insurance funds—has strengthened in some countries. However, in a downside scenario, domestic investors may not be able to smoothly absorb the supply resulting from a widespread foreign retrenchment. In many countries, recurring current account deficits entail the need for continued capital inflows. Given elevated government financing needs in many countries in emerging Europe, funding gaps could emerge if investor sentiment deteriorated markedly (Figure 2.47). This is a particular concern in Hungary, where parent banks are retrenching, the share of foreign holdings in the local government debt market is at historic highs, and foreign investor confidence in the economic policy framework has weakened.

In turn, developments across emerging Europe could add to strains in western Europe.

Potential dislocations in sovereign debt markets in emerging Europe could present a systemic risk to Austrian banks and, more indirectly via counterparty risk, to the rest of western Europe's

Table 2.4. Capital Flow, Banking, and Policy Indicators in Selected Emerging and Other Markets

	Vulnerability of External Sector (percent of WEO projection of 2012 reserves)					Banking System Cross-Border Financing Vulnerability		Vulnerability of Real Economy to Euro Area	Fiscal Policy Room[1]		Monetary Policy Room[2]		Position in the Credit Cycle[3]
						Liabilities to BIS reporting banks							
	Current account deficit in 2012[4]	External refinancing needs in 2012[5]	Short-term liabilities to BIS reporting banks	Debt portfolio liabilities[6]	Equity portfolio liabilities[6]	Percent of total credit[7]	Percent of 2012 GDP	Exports to euro area (percent of 2010 GDP)	Gross public debt (percent of GDP)	Adjustment of primary balance (percent of GDP) in 2011–20 to achieve debt target in 2030[8,9]	2012 inflation target (percent)[10]	WEO projection of 2012 CPI inflation (percent)	Growth of private credit since Dec. 2008 (percent of 2012 GDP)
Europe													
Croatia	–2.7	144	119	57	6	78	96	10.2	52	. . .	. . .	2.5	6.9
Hungary	–6.1	154	60	108	36	52	67	41.9	76	5.3	3.0/4.0	5.0	–0.8
Kazakhstan	–24.1	37	13	43	7	16	8	10.2	15	–6.1	6.0–8.0[11]	6.4	6.6
Poland	27.5	135	40	110	29	28	28	19.0	56	4.4	2.5/3.5	3.2	12.5
Romania	16.4	100	64	12	4	61	44	16.5	35	1.8	3.0/4.0	3.6	4.4
Russia	–17.3	31	13	9	47	16	8	9.0	11	–2.4	5.0–6.0[12]	6.2	13.2
Turkey	82.0	164	96	70	75	23	18	5.0	37	–1.8	5.0/7.0	8.6	23.4
Ukraine	37.8	181	28	61	10	14	13	5.4	38	–0.1	. . .	9.6	2.4
Africa and Middle East													
Egypt	45.6	33	79	75	23	. . .	8	3.2	79	. . .	. . .	10.8	1.6
Israel	2.4	. . .	18	47	75	5	9	5.5	73	0.8	1.0–3.0[11]	2.3	10.8
Lebanon	17.4	175	11	. . .	. . .	6	14	1.8	135	. . .	. . .	4.5	30.5
Nigeria	–42.3	. . .	12	23	20	. . .	3	8.2	19	–3.7	. . .	11.0	11.7
South Africa	54.0	88	35	91	303	9	9	4.2	40	2.5	3.0–6.0[13]	5.5	7.0
Asia													
China	–6.7	14	10	0	6	5	6	3.9	23	–0.2	. . .	3.5	52.1
India	17.8	33	44	11	46	11	12	2.0	66	7.9	. . .	8.5	16.2
Indonesia	2.9	37	41	48	73	18	9	2.0	24	0.6	4.5/5.5	7.5	9.4
Korea	–8.1	. . .	43	58	82	16	19	3.8	30	. . .	3.0/4.0	3.2	11.0
Malaysia	–24.4	24	28	48	51	14	22	7.4	55	5.3	. . .	2.7	27.7
Philippines	–3.8	20	18	35	12	18	12	3.3	40	–0.5	4.0/5.0	4.2	6.6
Taiwan Province of China	–8.6	. . .	19	. . .	. . .	. . .	22	. . .	43	. . .	. . .	. . .	. . .
Thailand	–4.7	22	9	8	36	7	10	4.5	43	1.8	0.5–3.0[12]	5.5	25.3
Vietnam	12.7	34	37	. . .	. . .	. . .	15	8.4	46	. . .	. . .	2.7	. . .

Table 2.4. Capital Flow, Banking, and Policy Indicators in Selected Emerging and Other Markets (*continued*)

	Vulnerability of External Sector (percent of WEO projection of 2012 reserves)					Banking System Cross-Border Financing Vulnerability		Vulnerability of Real Economy to Euro Area	Fiscal Policy Room[1]		Monetary Policy Room[2]		Position in the Credit Cycle[3]
						Liabilities to BIS reporting banks							
	Current account deficit in 2012[4]	External refinancing needs in 2012[5]	Short-term liabilities to BIS reporting banks	Debt portfolio liabilities[6]	Equity portfolio liabilities[6]	Percent of total credit[7]	Percent of 2012 GDP	Exports to euro area (percent of 2010 GDP)	Gross public debt (percent of GDP)	Adjustment of primary balance (percent of GDP) in 2011–20 to achieve debt target in 2030[8,9]	2012 inflation target (percent)[10]	WEO projection of 2012 CPI inflation (percent)	Growth of private credit since Dec. 2008 (percent of 2012 GDP)
Latin America													
Brazil	17.4	29	27	61	85	7	10	1.7	64	–1.6	4.5/6.5	5.0	29.7
Chile	11.6	100	63	59	41	26	20	5.3	11	0.5	3.0/4.0	3.2	13.6
Colombia	33.5	56	35	82	12	8	5	1.4	34	–0.8	3.0/4.0	3.1	11.4
Mexico	5.2	39	30	87	85	16	10	1.2	43	1.3	3.0/4.0	3.6	4.5
Peru	7.6	19	32	19	40	. . .	18	3.4	22	–2.4	2.0/3.0	2.6	7.1
Venezuela	–76.7	153	13	89	1	5	4	0.7	52	. . .	. . .	33.4	7.0

Sources: Bank for International Settlements (BIS); Consensus Economics; Haver Analytics; IMF, Direction of Trade, International Financial Statistics, Monetary and Financial Statistics, and World Economic Outlook (WEO) databases; BIS-IMF-OECD-World Bank Joint External Debt Hub (JEDH); and IMF staff estimates.

Note: Values for 2012 GDP are WEO projections. JEDH and WEO debt data are incompatible when one set is at market value and the other is nominal.

[1]Values in both columns are red if debt-to-GDP ratio is above 40 percent and adjustment of primary balance is positive.

[2]Red if WEO forecast for 2012 inflation is either greater than 9 percent or above upper bound of inflation target for 2012.

[3]Values in red cells are in the top 25 percent of values in column; green, bottom 25 percent; yellow, 25th to 75th percentiles.

[4]WEO projection of the 2012 current account deficit.

[5]An IMF staff estimate of short-term debt at initial maturity at end-2011 plus amortization of medium- and long-term government debt during 2012.

[6]Calculated from country's international investment position (IIP).

[7]Total credit is credit to the private sector plus total public debt.

[8]The higher the indicated primary balance adjustment, the greater the degree of fiscal tightening needed to reduce the debt-to-GDP ratio to 40 percent in 2030, and thus the less available fiscal space. If the debt ratio is already less than 40 percent, the indicated adjustment is that required to stabilize debt at the end-2012 level by 2030. For methodology, see April 2012 *Fiscal Monitor,* Statistical Table 10.

[9]The required adjustment is computed in terms of the cyclically adjusted primary balance, defined as the cyclically adjusted balance (CAB) plus gross interest expenditure. For Chile and Peru, structural balances are used instead of CABs.

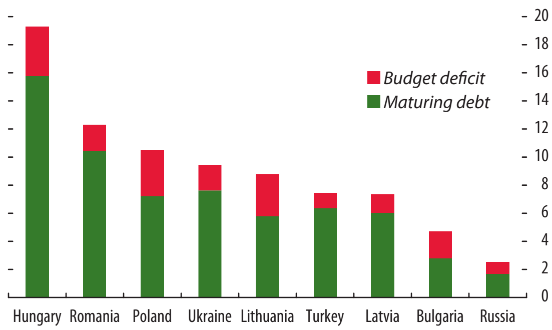
[10]Based on headline CPI data except as noted. Range (x–y) indicates no explicit target except as noted. For inflation targeters (x/y), first number is the midpoint of the target range, and the second is the upper bound.

[11]Target range with no explicit midpoint or upper bound.

[12]Has a target range with no explicit midpoint or upper bound. For 2012, also has a core inflation target of 4.5–5.5 percent.

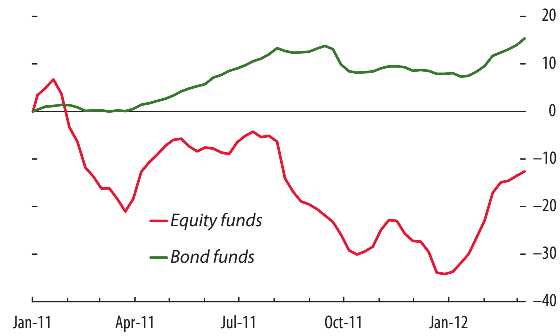
[13]Core inflation; target range but no midpoint.

Figure 2.47. Emerging Europe: Sovereign Gross Financing Needs, Selected Countries, 2012
(In percent of GDP)



Source: IMF staff estimates.

Figure 2.48. Net Flows into Emerging Market Funds, 2011–12
(In billions of U.S. dollars, cumulative from January 1, 2011)



Source: EPFR Global.

banking system.[19] For example, Austria and Belgium have systemically important financial institutions with significant exposure to Hungarian sovereign debt.

The volatility of capital flows to emerging markets has increased, while the direction is highly uncertain.

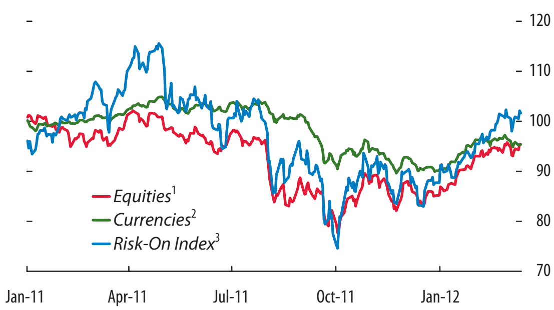
Portfolio and other capital flows to emerging markets have rebounded strongly in 2012, reversing much of the sharp decline during the second half of 2011, when strains in Europe escalated (Figure 2.48). At the time, emerging market authorities responded to the turbulence by selling some foreign currency reserves in a bid to smooth exchange rate moves. Local bond markets generally experienced less selling pressures, although in some cases, notably Indonesia, the authorities intervened heavily in local bond markets to cushion the withdrawal of foreign investors. Providing further stimulus, several emerging market central banks—such as those in Brazil, Chile, Indonesia, the Philippines, Romania, and Thailand—reduced their policy rates as growth forecasts were marked down.

The recent stabilization of euro area financial markets has prompted a rebound in capital flows to emerging markets. With reduced concern about tail risks in Europe, investors have refocused on some of the structural advantages of emerging markets, including superior growth prospects and stronger public and private balance sheets. The renewed optimism has helped prompt some equity markets—notably in Brazil, India, and Turkey—to rally since end-2011, while dollar funding pressures have eased and bond issuance has rebounded (Figure 2.49). As discussed in previous GFSRs, the effect of expansionary monetary and liquidity policies in advanced economies, coupled with the relative attractiveness of emerging markets, could lead to a further resurgence in capital flows that could strain the capacity of local markets and build up new vulnerabilities over time. In response to heavy inflows, the first line of defense is an appropriate use of macroeconomic policies. Macroprudential tools, and in some cases the careful use of capital flow measures, can play a supporting role. However, emerging market policymakers face a two-way risk and must also be prepared for the possibility of sudden outflows, as discussed below.

Under the *complete policies* scenario the volatility of capital flows would be reduced as the accompanying reduction in downside risks emanating from the euro zone would lead to more predictable patterns in flows. Furthermore, as monetary and liquidity policies normalize, this could also lead to a more balanced pattern of flows. The reverse is true under the *weak policies* scenario.

[19]Western Europe refers to the euro area plus Denmark, Iceland, Norway, Sweden, Switzerland, and the United Kingdom.

Figure 2.49. Performance of Emerging Market Assets, 2011–12
(Indices)



Source: Bloomberg L.P.
[1]MSCI emerging markets index in local currency.
[2]JPMorgan emerging market currency index (against U.S. dollar).
[3]Fisher-Gartman index capturing global risk sentiment.

A reversal of capital flows could amplify the negative effects of bank deleveraging.

Emerging market resilience to capital flow reversals withstood the test of the Lehman crisis and the recent episode of market stress. Many countries, particularly in Asia and Latin America, have higher stocks of reserves today than they held at the onset of the Lehman crisis in 2008. However, another sustained period of capital outflows—as might occur in the *weak policies* scenario—could put severe strains on countries that have received large inflows and accumulated high short-term external debt (Table 2.4). Heavy capital inflows to emerging markets in 2009–11, and greater involvement of foreign investors in local markets, have also increased the amount of potential "hot money" that might depart suddenly in the face of a severe shock.

The impact of sudden outflows on credit and GDP growth in emerging markets could be considerable. An econometric model presented in Box 2.5 shows that if total net inflows received by emerging markets in the period 2009–11 were reversed over a single quarter—as happened during the Lehman crisis—credit growth would fall by 2 to 4 percent, and GDP growth would decline by 1.5 to 2 percent on average. For a country like Brazil, which received a large amount of foreign capital during this period, the impact on growth could be on the order of 2 percentage points, even though the stock of reserves is sufficient to cover short- and medium-term financing needs.

Homemade vulnerabilities remain, particularly in domestic credit markets.

Many emerging markets have homemade vulnerabilities, including high fiscal deficits (e.g., Hungary and India), high external deficits (e.g., Turkey and Ukraine), credit-quality concerns, and political uncertainty (notably in parts of the Middle East). These vulnerabilities exacerbate the potential susceptibility of these emerging markets to external shocks. Table 2.4 provides some summary statistics for major emerging market and other countries on vulnerabilities, to external shocks in particular, as well as measures of policy space to buffer negative shocks. Among regions, emerging Europe registers the greatest strains.

Many emerging markets are in the advanced stages of the credit cycle. As detailed in the September 2011 GFSR, banking systems can be more vulnerable to increases in nonperforming loans in the wake of a rapid credit expansion and therefore less able to withstand externally generated shocks. In many cases, a policy response involving a fresh expansion of credit may add to domestic financial stress.

Credit conditions in China warrant special attention in light of the country's considerable size and systemic importance to the global economy. Property and credit markets represent potential vulnerabilities in an environment of decelerating—although still brisk—growth. In part because of administrative measures intended to prevent or deflate property bubbles, house prices in most Chinese cities have been moving down in recent months. Housing affordability is still stretched, and many market participants are concerned that price declines might accelerate, putting pressure on property developers, local governments relying on land sales for revenue, and other exposed sectors (Figures 2.50 and 2.51). With real estate investment accounting for 13 percent of economic output and about 20 percent of bank loans, difficulties in the property sector could have important effects on the quality of bank assets.

China is already at an advanced stage of the credit cycle. As a consequence of effective stimulus measures adopted in response to the global financial crisis, overall credit in China grew at the average annual rate of more than 25 percent in 2009–10, bringing the overall credit-to-GDP ratio above

Box 2.5. What Happens in Emerging Markets if Recent Bank and Portfolio Inflows Reverse?

A substantial amount of foreign portfolio and bank-related capital has been flowing into a number of emerging market economies since 2009. A reversal of these flows as a consequence of financial deleveraging or waning risk appetite could place the financial sectors of many of those economies under substantial pressure. Research indicates that under the shock of a flow reversal, growth prospects would deteriorate and currencies would weaken vis-à-vis the U.S. dollar. Bank lending to the private sector would contract significantly, and the asset quality of banks' balance sheets would deteriorate.

Large amounts of foreign bank-related and portfolio capital have been flowing into emerging markets since gross capital flows collapsed in late 2008 (Figure 2.5.1).[1] Although net capital flows to emerging markets have not been excessively strong by historical standards, there have been unusually high portfolio flows into certain countries (Figure 2.5.2), reflecting the desire of real money investors, including central banks and sovereign wealth funds, to increase exposure to emerging markets.[2] Flows into local currency bond markets have been especially strong since early 2009, in part because of wide interest rate differentials between emerging market and advanced economies.

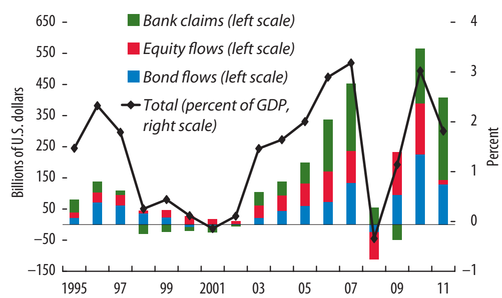
Research suggests that the financial sector in emerging markets could be particularly exposed to a sudden reversal of bank-related and portfolio flows (De Bock and Demyanets, 2012). These flows are more closely correlated with developments in emerging market banking sectors than are other flow measures, such as foreign direct investment or net capital flows. If portfolio inflows come to a sudden stop, the fall in asset prices would decrease the net worth of firms and negatively affect bank balance sheets, diminishing an economy's capacity to generate credit.

Note: Prepared by Reinout De Bock.

[1]Foreign portfolio and bank-related flows correspond to (1) foreign portfolio inflows (debt and equity) and (2) investment liabilities associated with foreign banks from the "other investment" category in the IMF's *International Financial Statistics*.

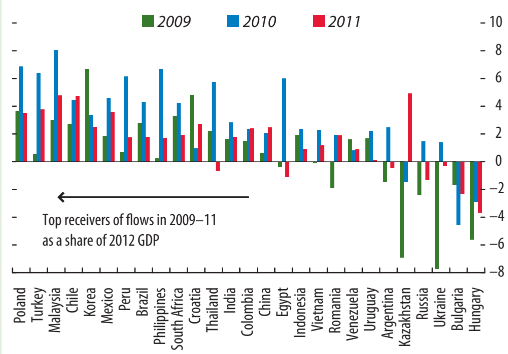
[2]Chapter 1 of the September 2011 GFSR discusses these trends in detail.

Figure 2.5.1. Bank and Portfolio Flows to Emerging Markets, 1995–2011



Sources: Haver Analytics; IMF, International Financial Statistics and World Economic Outlook databases; and IMF staff estimates.
Note: Portfolio and bank-related liabilities for 27 emerging markets. Values for 2011 are estimates.

Figure 2.5.2. Foreign Bank and Portfolio Flows, Selected Emerging Market Economies, 2009–11
(In percent of GDP for the given year)



Sources: Haver Analytics; IMF, International Financial Statistics and World Economic Outlook (WEO) databases; and IMF staff estimates.
Note: GDP values for 2012 are WEO projections. Some 2011 values are estimates.

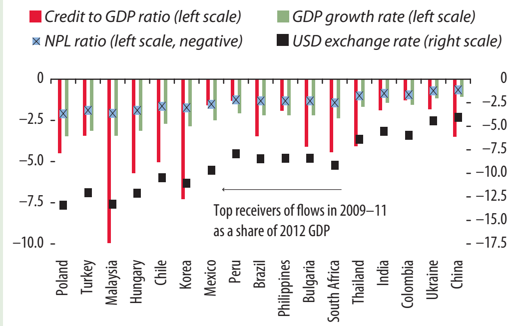
According to our econometric analysis, an abrupt reversal of foreign bank and portfolio flows is associated with a sharp contraction of credit and deterioration in loan quality, which potentially would force banks to recapitalize. Growth prospects deteriorate and currency valuations come under pressure. The depreciation pressure on currencies has clear policy implications, as it typically leads to substantial foreign exchange intervention and reserve loss. Debt denominated in foreign currency is harder to service

Box 2.5. *(continued)*

when the domestic currency weakens. Banks are also exposed to credit risk on foreign currency denominated loans to firms that themselves are not hedged against depreciation.

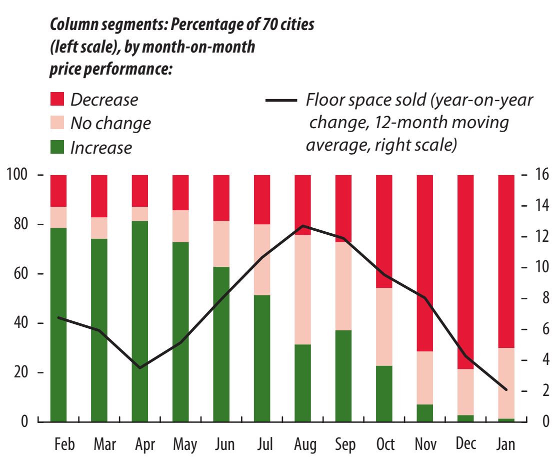
Figure 2.5.3 shows estimates of the first-year response of credit, asset quality, GDP, and the nominal exchange rate to a sudden reversal of the portfolio and bank-related inflows observed in 2009–11 (scaled by World Economic Outlook forecasts for 2012 GDP). The simulation is based on a fixed effects, structural panel, vector autoregression (VAR) model with nonperforming loan ratio, growth rate of private credit (as a percent of GDP), portfolio and bank flows (percent of GDP), GDP growth, and the change in the U.S. dollar exchange rate, as described in De Bock and Demyanets (2012). The shock is calculated versus the VAR model prediction based on 2010 values. The results indicate that growth risks to a reversal of flows are currently most elevated in Hungary, Poland, and Turkey. Credit as a share of GDP would contract strongly in Hungary, Korea, Malaysia, and Poland. Currencies would also be hit significantly, with an annual depreciation of up to 15 percent vis-à-vis the U.S. dollar.

Figure 2.5.3. What Happens If the Bank and Portfolio Inflows of 2009–11 Reverse?
(First-year change, in percentage points)



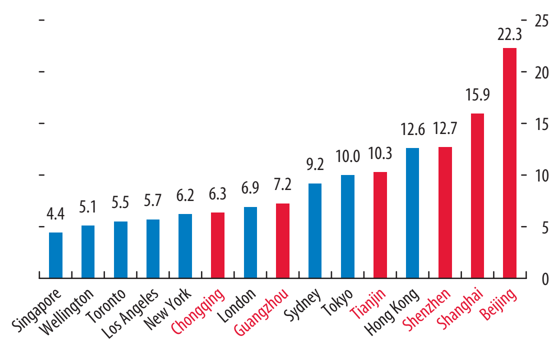
Sources: Bankscope; Haver Analytics; IMF, International Financial Statistics and World Economic Outlook databases; and IMF staff estimates.
Note: Shown are annual responses if the foreign portfolio and bank flows observed in 2009–11 reverse (calculated relative to a vector autoregression model prediction based on 2010 values). Bulgaria, Hungary, and Ukraine had outflows for the period 2009–11, which are assumed to continue at the same pace. For further details, see the box text and De Bock and Demyanets (2012). NPL = nonperfoming loan.

Figure 2.50. Changes in Residential Property Prices and Sales in China, 2011–12
(In percent)



Sources: CEIC Data; and IMF staff estimates.
Note: Price data are for 70 cities in mainland China; sales data are national.

Figure 2.51. Ratio of House Price to Annual Household Income for Selected Cities, 2011



Sources: CEIC Data; 8th Annual Demographia International Housing Affordability Survey; national statistical offices; and IMF staff estimates.
Note: Data for cities in mainland China (in red), Tokyo, and Singapore are calculated as the price of a 70 square meter home divided by average annual pretax household income; data for other cities are the median house price divided by median pretax household income, as reported by Demographia.

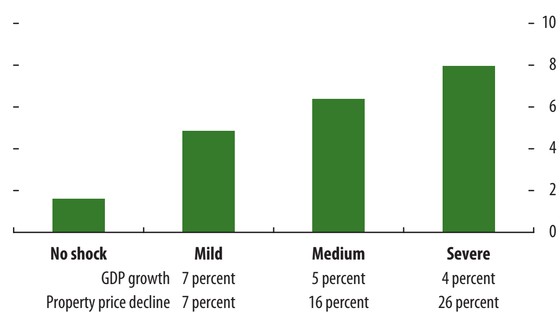
150 percent. Stress tests by the Chinese authorities (conducted in the context of the recent Financial Sector Assessment Program with the IMF and World Bank) suggest that, in a tail risk scenario with weak growth and plunging house prices, nonperforming loan rates could rise as high as 8 percent (Figure 2.52). While China clearly possesses the fiscal resources to recapitalize domestic banks facing difficulties, incipient problems with credit quality would likely deter the authorities from repeating the 2008–09 strategy of rapid domestic credit expansion.

Similar concerns apply to Brazil, which experienced average annual credit growth rates of about 20 percent during the 2008–11 period, raising credit in relation to GDP (Figure 2.53). Rapid growth in directed credit from the state-run development bank (BNDES) helped to limit the impact of the Lehman shock on the economy in 2009. But the continued expansion of public and private bank balance sheets has already led to rising nonperforming loan rates, particularly in the household sector. Under these circumstances, the scope for using the credit channel to counter negative shocks may be limited.

Many emerging markets have built buffers that can withstand a moderate shock from Europe, but policy space needs to be used wisely and, under larger shocks, may prove to be inadequate.

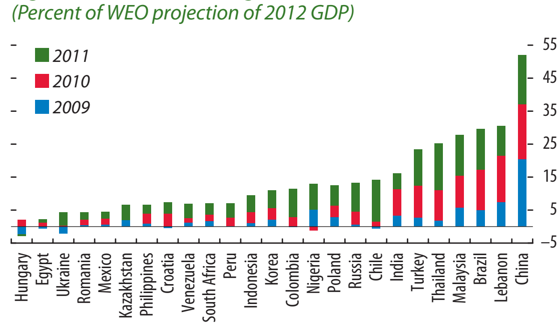
Emerging markets inevitably remain exposed to volatility, including external shocks through trade and financial channels. Yet in many cases, they have sufficient foreign exchange buffers and policy space—monetary, fiscal, and credit—to counter a range of financial and economic shocks such as those envisaged under the *current policies* scenario. The experience of 2008 in emerging economies as diverse as Brazil, China, Korea, and Russia was that the countercyclical use of available policy space, along with the creative deployment of targeted facilities and instruments, can be effective in sustaining growth in the face of a major external shock. However, in some cases—notably in eastern Europe—policy room is more limited today, while the potential shock could be larger than in 2008, especially under the *weak policies* scenario.

Figure 2.52. China: Projected Nonperforming Loan Rates under Adverse Macroeconomic Scenarios
(In percent of total loans at end-2009)



Source: IMF, Financial System Stability Assessment for the People's Republic of China.

Figure 2.53. Annual Change in Private Credit, 2009–11
(Percent of WEO projection of 2012 GDP)



Sources: Haver Analytics; IMF, International Financial Statistics and World Economic Outlook (WEO) databases; national authorities; and IMF staff estimates.

The Quest for Lasting Stability

Developments in the euro area remain the key risk to global financial stability. Recent important policy steps have brought some much-needed relief to financial markets, as sovereign spreads have eased, bank funding markets have reopened, and equity prices have rebounded. However, new setbacks could still occur. The path ahead has significant political and implementation risks, and policies need to be further strengthened to secure and entrench financial stability. Policymakers should therefore build on recently agreed reforms and complete the policy agenda. Policymakers also need to coordinate a careful mix of financial, macroeconomic, and structural policies to ensure a smooth deleveraging process that puts the financial system in a good position to support the economy. This should be accompanied by further steps toward financial and fiscal integration to prevent creeping financial market fragmentation in the euro area and reap the full benefits of a financially stable monetary union. The challenges facing other key advanced economies remain largely unchanged since the last GFSR. In particular, both Japan and the United States have yet to forge a political consensus for medium-term deficit reduction, which is crucial to secure debt sustainability and preserve market confidence. Most emerging markets, in turn, are well positioned to buffer moderate deleveraging forces emanating from the euro area, but their resilience could be tested in a downside scenario, most notably in emerging Europe. Meanwhile, progress is being made in strengthening the global regulatory framework, but agreements in key areas still need to be concluded and implemented.

Recent policy action has provided a much-needed reprieve, but euro area sovereign bond markets remain vulnerable.

The euro area crisis remains the main risk to global financial stability, requiring further policy action to preclude highly adverse outcomes and to shift the dynamics firmly toward a situation of lasting stability. To be sure, euro area policymakers have continued over the past few months to take crucial and unprecedented steps to overcome the crisis, as detailed in Chapter 1, Box 1.1.

Reflecting this progress, sovereign risk premiums have eased from their late-2011 peaks, banks have started tapping the senior debt market again, and equities have rebounded. Nonetheless, the situation in several euro area sovereign bond markets is still precarious. Current fragilities leave sovereign bond markets exposed to the risk of renewed turmoil: negative news or sudden changes in sentiment could quickly drive up yields again and further weaken the investor base if expectations shift back toward a bad equilibrium. The close link between sovereigns and banks could amplify the resulting threat to financial stability. Such shocks cannot be completely ruled out even if the countries concerned fulfill their policy reform commitments. Indeed, strains in euro area sovereign bond markets remain elevated; these reflect not only specific country weaknesses but also broader investor concerns about cohesion in the euro area, as policies still remain somewhat short of the oft-pledged "whatever it takes" to shore up confidence.

Disorderly European bank deleveraging could have serious consequences for growth in the region and beyond.

Faced with high sovereign risk, a weaker growth environment, and a legacy of insufficient capital cushions and imbalanced funding models, many major European banks have announced substantial plans to reduce their balance sheets. The drivers of this process are both cyclical (owing to current market stresses and weak growth) and structural (reflecting high initial leverage, the need to adapt business plans, and impending regulatory changes). In many cases, the envisaged adjustments are both inevitable and desirable. Their overall macro-financial impact depends, however, on the nature, pace, and scale of the deleveraging process. Thus, a synchronized, large-scale, and aggressive shedding of bank assets could have severe consequences for the real economy in the euro area and beyond. Under the current policies scenario, this GFSR estimates total balance sheet shrinkage of some $2.6 trillion (€2.0 trillion) over the next two years, which represents about 7 percent of bank assets. The impact of bank deleveraging is global, although it will likely be strongest in the periphery of the euro area and in emerging Europe.

Current dynamics also portend a risk of some retrenchment behind national borders and fragmentation of euro area financial markets.

In many respects, the difficulties facing the euro area mirror the fundamental challenge of reconciling sovereignty with membership in a currency union. Euro area members have surrendered control over monetary policy, fostering a close integration of financial markets. At the same time, countries are reluctant to cede competence over other policy areas that have a bearing on the stability of those integrated financial markets. Now that the euro area crisis has exposed the deficiencies of the existing institutional framework, the consequence is a painful and haphazard process of reform under market pressure.

The dynamics of the current crisis may already be causing some tendency toward financial retrenchment behind national borders and fragmentation within the common currency area. For instance, the investor base for government bonds in many countries is becoming more domestic again; banks are making disproportionately large cuts to their cross-border exposures as they retrench; and some nonfinancial corporations are again considering cash flows and balance sheet positions on a country-by-country basis.

These centrifugal tendencies have been balanced by increasing public sector efforts to shore up the monetary union, notably through official loans and scaled-up ECB operations. However, the ECB's policy response, while necessary and effective, also reverses some elements of integration. Collateral rules for monetary operations are now differentiated by country, and the financial risks associated with the provision of liquidity under certain types of collateral are now excluded from the usual loss-sharing framework.

If such temporary forces were collectively to become entrenched, they could dilute the essential benefits of the common currency and weaken support for the euro. Forging political agreement on the comprehensive set of reforms outlined in the complete policies scenario and moving toward greater integration is, of course, difficult and will require concessions from both sides: those wary of mutualizing risks, and those loath to make further transfers of national sovereignty. Box 2.6 explores the benefits and drawbacks of various proposals for ex ante risk sharing through common eurobond issuance as part of a fuller fiscal union. Without more progress in crucial areas, including more centrally articulated frameworks for crisis prevention, management, and resolution, euro area authorities will find it difficult to deliver on their promise of a stability and growth union.

Urgent steps are being taken to match policy reform efforts in vulnerable member countries with a powerful financing backstop to curtail the risk of a "run" on solvent euro area sovereigns.

Countries currently facing market pressures must sustain their resolve to rectify fiscal, structural, and external imbalances that weigh on investor confidence. Across the rest of the euro area, these efforts should be matched by a more resounding message of solidarity, cohesion, and support. Key to assuaging market fears is a credible firewall that is large, robust, and flexible enough to stem contagion and facilitate the adjustment process in the highly indebted countries. Any lasting solution also needs to tie the availability of financial support to continued policy progress. But a well-designed package of financing assurances and reform could likely garner enough credibility to ensure affordable market funding conditions, with official facilities acting only as contingent credit lines.

The recent decision by euro area policymakers to raise the effective lending capacity of the ESM (through accelerated buildup of capital and temporary backstopping by the EFSF) will strengthen the European crisis mechanism and support the IMF's efforts to bolster the global firewall. The crisis facilities should also have the flexibility to take direct stakes in banks and assist the restructuring of financial institutions where necessary. This will help stem the adverse feedback loop between domestic banking and sovereign risks in the euro area.

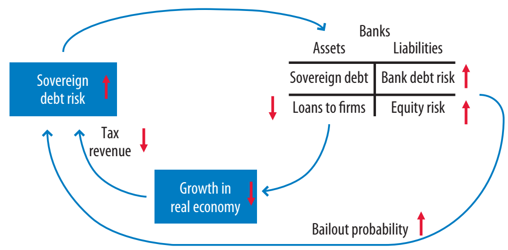
Box 2.6. Eurobonds and the Future of the Economic and Monetary Union

When the Economic and Monetary Union (EMU) was set up, it was recognized that an efficient monetary union would require deep economic and financial integration. Some argued that, for the EMU to work well, it would eventually require political and fiscal union. However, the choice at its inception was to focus on economic and financial integration and on disciplining fiscal policy rather than on creating a fiscal union. The crisis has shown that fiscal disciplining mechanisms failed, that economic integration remains limited, and that financial integration causes difficulties if national authorities remain ultimately responsible for their financial systems.

Market pressure is now forcing fiscal integration, albeit ex post. The recently established crisis management facilities (EFSF, EFSM, and ESM)[1] and the use of the European Central Bank balance sheet to support sovereign bond markets implicitly mutualize some of the fiscal risks in the EMU. Countries that are cut off from private funding at rates deemed to be sustainable have conditional access to official funding at better rates. In essence, EFSF/EFSM/ESM bonds are a form of euro bonds, although perhaps not the most efficient one. Worries about moral hazard are being addressed by applying strict conditionality.

Ex ante fiscal risk sharing is essential for an effectively functioning monetary union, but it will require a strengthening of economic governance. Waiting for a crisis to develop in part of the monetary union before supporting member countries is not an efficient use of economic resources. Invariably, economic dislocations in one country affect the rest of the monetary union, creating contagion and leading to divergence rather than convergence in economic and financial conditions, detracting from the benefits of membership (Figure 2.6.1). Mechanisms to share risk vary from access to common bond issuance to a full-fledged fiscal union with a large federal budget, but they have one thing in common: the surrender of a considerable degree of national fiscal autonomy. In this spirit, the recently adopted Fiscal Compact

Figure 2.6.1. Spillovers of Distress among Sovereigns, Banks, and the Real Economy



goes some way toward improving fiscal governance, though a further strengthening of the role of euro area institutions will be essential.

Eurobonds, which provide for common sovereign borrowing with joint and several liability, can be a useful tool for fiscal risk sharing. As such they provide important benefits by helping to prevent crises and insure against contagion:

Risk sharing and resilience to shocks. Joint issuance can prevent sharp increases in borrowing costs due to country-specific shocks or market tremors, thereby providing an implicit transfer from countries not affected by such events. As a result, sovereign yields are less sensitive to swings in risk aversion and multiple equilibria.

Breaking the banking-sovereign feedback loop. At present, financing conditions of the sovereign determine those of the rest of the economy because of national responsibility for financial systems. Moreover, banks and sovereigns are linked in a vicious loop in which their respective weaknesses reinforce each other. During the crisis, banks' stocks plunged in countries where sovereign debt was perceived as riskier, leading to expectations of a public bailout and further increasing the perceived risk in government bonds. Conversely, where banks were weak, their bailout caused difficulties for the sovereign. By allowing banks to switch from country-specific to euro area risk, eurobonds would help reduce the close ties between banks and the risks of individual sovereigns.

Providing a liquidity premium. By trading in a unified sovereign bond market much larger than the market for any single sovereign, eurobonds would deliver a substantial liquidity gain.

Note: Prepared by Esther Perez Ruiz.

[1]European Financial Stability Facility, European Financial Stabilisation Mechanism, and European Stability Mechanism.

Box 2.6. *(continued)*

Existing eurobond proposals promise to deliver to different degrees along these dimensions:

- Under *full eurobonds* (Boonstra, 2005, 2010), all euro area sovereign financing would be raised through common bonds. A joint agency would issue the common bond and distribute the proceeds. Full eurobonds would deliver the highest benefits in terms of lower borrowing costs for distressed sovereigns and improved resilience of the financial system. At the same time, full eurobonds would have the strongest distributional impact among participating members, posing high risks of moral hazard.
- *Partial eurobonds*, in the spirit of the "blue bond" proposal (Delpla and Weizsäcker, 2010), would convert national debt up to a certain share of GDP into eurobonds (the blue bond), with the rest to be issued nationally (the red bond). The safe bond would protect states from an acute funding crisis, while intensified market pressures on the national tranche would provide market discipline, limiting the risk of moral hazard. It would be difficult, however, to preserve the credibility of the ceiling once the blue bond allocation is exhausted. Financial stability benefits of partial eurobonds would be commensurate with the size of the safe component—ranging from 60 percent of GDP in the blue and red proposal to 10 percent of GDP in the eurobills proposal (Hellwig and Philippon, 2011). The wide range illustrates the difficulties in calibrating the strict limit that separates liquidity from solvency issues.
- The *pooling proposal* (Brunnermeier and others, 2011) would limit risk sharing while preserving liquidity benefits. Under this proposal, sovereign bonds would continue to be issued separately, leaving sovereigns subject to market discipline; but a synthetic security would be created with a safe tranche and a risky tranche. The safe tranche would help delink sovereign and banking risks.

A move toward eurobonds faces some political economy obstacles. While it is relatively straightforward to see how eurobonds can operate in a new steady state combined with a different governance structure, it is not obvious how one can move there from the current situation. Some proposals that address the political economy dimension are those of the German Council of Economic Experts (2011) and of Hellwig and Philippon (2011). Meant to be implemented on an experimental basis, both proposals preserve the political status quo and are compatible with current EU Treaty no-bailout provisions. The proposal of the German Council aims to reduce debt overhang by granting a joint guarantee for debt *above* 60 percent of GDP. The approach would have certain similarities to bonds issued by the EFSF, but financing would be an instrument available to all countries outside any crisis context. To ensure sufficient creditworthiness, some additional collateral would be provided by countries.

The euro area must coordinate national macroeconomic policies to ensure an orderly process of deleveraging and rebalancing.

Looming in the background of current market strains is the problem of large-scale imbalances across the euro area—persistently high deficits in some parts mirrored by persistent surpluses elsewhere—that were built up over the previous decade. A sudden stop in flows from savers to borrowers is now imposing harsh retrenchment costs on households and governments in several countries, often reinforced by simultaneous deleveraging in the banking system. Together, these forces could have a contractionary or even a deflationary impact that is self-defeating.

It is thus crucial to cushion the impact of adjustment with other policies geared toward supporting growth. These should include: (1) sufficiently accommodative monetary policy, consistent with the objective of price stability and the recognition that deflationary dynamics, once in train, are particularly difficult to reverse; (2) a sufficiently gradual withdrawal of fiscal support in countries not subject to market pressures; and (3) structural reforms that raise productivity, strengthen competitiveness, and thereby lay the foundation for stronger, sustained growth and more balanced external accounts.

These efforts need to be supported by financial policies aimed at ensuring an orderly deleveraging of the euro area banking system. Although lasting stabilization of government bond markets will go a long way toward easing the pressures currently weighing on banks, additional targeted measures are needed, including:

- the restructuring of viable banks and the resolution of nonviable banks, whose continued existence allows problems to fester and weighs on the performance of the entire sector;
- funding support for viable banks under pressure through a centralized program of funding guarantees; and
- close macroprudential oversight by the European Systemic Risk Board (ESRB) and EBA along with national authorities to assess the aggregate impact of deleveraging and to alleviate pressure points.

Moreover, with an eye toward implementation of Basel III, supervisors need to ensure that credit institutions maintain adequate capital and liquidity positions beyond the horizon of the current EBA recapitalization exercise, notably by exercising adequate restraint on dividend and remuneration policies and monitoring the quality of instruments qualified as own funds.

These efforts should be set in the context of a move toward a more integrated currency union.

Steps are already under way to strengthen policy discipline and improve economic governance of the euro area. It is critical that future macroeconomic and financial imbalances be addressed and contained in a much more timely fashion. Enforcing a stricter fiscal framework is only one necessary element in that endeavor, as has been rightly recognized in the comprehensive reach of the EU's "six pack" legislation. A key role accrues, in particular, to proactive and countercyclical macroprudential policy, coordinated at the central level via the ESRB, that addresses the buildup of financial imbalances in a timely manner.

Over time, a move toward greater ex ante risk sharing will also be indispensible for a well-functioning monetary union. To this end, the euro area's financial system needs to be dealt with at the euro area level in all aspects that are crucial to financial stability, including supervision, deposit insurance, resolution, and backstopping with a mechanism for ex ante burden sharing. Greater fiscal risk sharing, conditional on more centralized fiscal governance, is equally desirable to prevent individual euro area countries from running into financing difficulties even if their fundamentals are otherwise sound. Committing to both now is essential to break the pernicious link between banks and sovereigns, preserve the benefits of a highly integrated monetary union, and secure the prospect of lasting financial stability.

Important medium-term debt challenges are also looming in other key advanced economies, notably Japan and the United States.

Risks to financial stability are currently concentrated in Europe, but they are not confined there. The fiscal policy challenges facing Japan and the United States easily rival those anywhere in the euro area, yet there is much less progress to date in laying out strategies to address those challenges. Both Japan and the United States require credible multiyear plans of deficit reduction which protect short-term growth but reassure financial markets that debt will return to a sustainable trajectory over the medium term.

In the United States, mortgage debt burdens need to be made sustainable through programs to facilitate principal write-downs (Annex 2.3). The first steps along this path, notably the recent agreement between banks, regulators, and state attorneys general as well as legislation in the Senate, are welcome but insufficient. Targeted reduction of mortgage principal for homeowners with heavy debt burdens would best be encouraged through the passage of legislation permitting mortgage "cramdowns" in personal bankruptcy proceedings. On public debt, American policymakers need to adopt all reasonable means of bringing down deficits in the medium term; these include reform of entitlements and higher revenue through removing unwarranted tax breaks and simplifying marginal rates. Credible measures that deliver and anchor savings in the medium term will help create space for accommodating growth *today*—by allowing a more gradual pace of consolidation.

Derivatives markets could be a channel through which shocks affecting European banks and sovereigns are transmitted to U.S. banks (see Box 2.4 for details). While U.S. banks' net derivatives exposures to European counterparties are small, their large gross positions are subject to large swings in market value, making the banks vulnerable to margin calls. The potential for destabilizing fire sales of assets is high, since quality collateral is scarce; and with derivatives market making concentrated among few broker-dealers, there is the potential for a failure cascade if a dealer experiences difficulties. The risks are partly offset by the capital buffers of U.S. banks, which a recent Federal Reserve stress test deemed adequate to withstand a global recession and adverse financial conditions (BGFRS, 2012a).

In Japan, policymakers need to take action to ensure the long-run sustainability of the sovereign debt market. Domestic banks have long held large portfolios of government bonds, and they increased those holdings over the past six months as many Japanese investors shifted out of foreign assets. This has compressed yields on government bonds over this period but has increased the longer-term risk of a large price adjustment that could impair bank capital. To reduce this risk, fiscal reform measures—including an increase in the consumption tax—are needed, as are financial reforms to reduce the vulnerability of banks' bond portfolios. A further priority for financial reform is action—already under way—to increase disclosure and monitoring of investment trusts that have recently served as a major conduit of household investment into complex and risky structured products.

Policymakers in emerging markets should stand ready to use their existing policy space to cushion negative external shocks.

For most emerging market economies so far, the deleveraging process that has been related to the actions of EU banks has been manageable. The authorities in these countries should stand ready to provide countercyclical support to their domestic economies within the available policy space identified in Table 2.4. In some cases, notably emerging Europe, this space is less than in 2008. Generally, however, the experience of 2008 shows that countercyclical policies, along with the creative deployment of targeted facilities and instruments, can be effective in sustaining growth in the face of a major external shock.

The scope for easing credit policy in particular is limited, as many emerging markets are already in the advanced stages of the credit cycle, as detailed in the September 2011 GFSR. Easing credit further would, therefore, add to domestic financial vulnerabilities, given that sustained periods of above-trend credit expansion tend to foreshadow higher nonperforming loan rates down the road.

A key challenge will be to control spillovers from the euro area into emerging Europe and elsewhere, notably by averting excessive retrenchment by EU parent banks.

Given existing vulnerabilities in some countries in emerging Europe, a major policy priority should be to ensure that deleveraging in this region does not become disorderly. Parent banks remain strategically committed to the region, but given increasing obstacles to cross-border capital movements and higher funding costs, their business model has seen some of its advantages reduced. To protect banking systems from pressures in the euro area, home and host regulators need to coordinate regulatory regimes to avert excessive home bias. Home regulators must avoid unilateral measures that threaten to accelerate deleveraging, while host regulators need to avoid an uncoordinated race to ring-fence liquidity and capital within national borders to the detriment of other countries. The "Vienna Initiative," which had helped avoid disorderly disengagement of western banks from central and eastern Europe in the crisis of 2008–09, also provides a useful platform to guard against undue home bias. "Vienna 2.0" was launched in January 2012 primarily with a view to stepping up such coordination and cooperation between home and host country supervisors.

Long-lasting stability of the financial system will be supported by progress in implementing the G20 regulatory reform agenda.

Long-lasting stability of the financial system will be supported by progress in implementing the G20 regulatory reform agenda. Priorities for G20 reform include the Basel III framework, policy measures for global systemically important financial institutions, resolution frameworks, and reforms to OTC derivatives markets. Policy efforts to control the systemic risk from derivatives markets need to be further advanced, and oversight of the shadow banking system should be strengthened (see Box 2.7).

The regulatory reform agenda in the United States remains a work in progress, and while the Dodd-Frank Act is expected to come into force in 2012, much uncertainty remains over its final provisions (see discussion in Box 2.7 on the Volcker Rule). It is essential to move ahead expeditiously in all key areas of financial reform. In particular, the designation of systemically important financial institutions has to be pursued; the migration of risks into the shadow banking system has to be closely monitored; and a proactive approach to surveillance of systemic risk has to be firmly grounded in the Financial Stability Oversight Council. Furthermore, the current juncture calls also for a proactive monitoring of the potential spillovers from Europe. The ongoing Federal Reserve stress tests and the recent call by the Securities and Exchange Commission to broaden the disclosure of European exposures are welcome steps to improve understanding of these spillovers.

In Europe, important progress has been made on the regulatory reform agenda, but more remains to be done. The European Commission proposal for EU-wide legislation (Capital Requirements Regulation/Capital Requirements Directive IV) to implement Basel III is a significant step toward improving regulatory standards. The proposal aims to achieve a common standard, implementing the Basel III requirements with maximum harmonization. Given prevailing balance sheet uncertainties—and in the absence of a common institutional framework, including EU-wide resolution arrangements and a fully unified fiscal backstop—higher standards are needed, and there should be adequate flexibility for prudential policies at the national level while duly taking into account cross-border spillovers and home-host coordination requirements. Furthermore, as the legislation is finalized, there should be an unequivocal commitment to implement the leverage ratio and net stable funding ratio in 2018, as agreed under Basel III.

Policy efforts to control the systemic risk from derivatives markets need to be further advanced, with special emphasis on ensuring consistency among the regulatory regimes across jurisdictions and close cooperation among supervisors. The proposed arrangements—such as central counterparties (CCPs)—are intended to improve price transparency in the market and facilitate better risk management but, to be effective, they require strong operational controls, appropriate collateral requirements, and sufficient capital. Because of the global nature of the derivatives market, supervising CCPs will require close cross-border coordination among national supervisors and regulators.

Box 2.7. Update on Regulatory Reforms

Progress has been made in the regulatory reform agenda since the September 2011 GFSR, but the work is not yet complete, and important implementation challenges remain (Figure 2.7.1). It is critical that the international community remain focused on consistent, timely, and high-quality implementation of the G20 regulatory initiatives. Strong multilateral commitment is key to ensuring the credibility of the reform agenda and avoiding regulatory arbitrage.

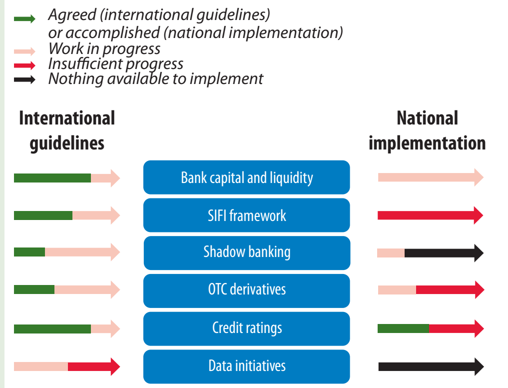
Implementation will be closely monitored and supported, not least through the Coordination Framework for Implementation Monitoring, newly developed through the Financial Stability Board (FSB), which aims at fostering discipline and transparency regarding individual countries' progress. Priority areas include the Basel III capital and liquidity framework, policy measures for global systemically important financial institutions (G-SIFIs), domestic and cross-border resolution frameworks, over-the-counter (OTC) derivatives market reforms, and data gaps.

Basel III

Implementation of the Basel III capital and liquidity framework is under way in several jurisdictions. Australian authorities have completed the first round of consultations on Basel III, while in the EU the Capital Requirements Directive IV (CRDIV) and associated Capital Requirements Regulation draft legislative proposals were issued in July 2011 for European Council and European Parliament action. The EU text assists the member states in meeting the Basel III deadline, though some elements of the initial proposal were not in full conformity with the agreed-upon Basel norms. In addition, the European Commission has launched a new high-level Expert Group to examine structural aspects of the EU's banking sector. Its final report to the Commission is due by end-summer 2012. The Basel Committee on Banking Supervision (BCBS) is monitoring implementation progress through its Standards Implementation Group. Assessing consistency of implementation will be challenging, but it is critical to ensuring that Basel III achieves the desired improvement in the resilience of the global financial system.

Note: Prepared by Ana Carvajal, Michaela Erbenova, Eija Holttinen, and Katharine Seal.

Figure 2.7.1. G20 Regulatory Reform Agenda: Key Elements and Status



Note: OTC = over-the-counter; SIFI = systemically important financial institutions.

G-SIFIs

The policy measures to address G-SIFIs, discussed in the September 2011 GSFR, have now been published (BCBS, 2011). These include the methodology to identify global systemically important banks (G-SIBs) and the details of additional loss absorbency capital requirement to be met with common equity: 1 percent to 2.5 percent of risk-weighted assets, with a potential ("empty bucket") supplemental capital charge of 3.5 percent to discourage any increase in systemic importance. The initial list of 29 G-SIBs has been published. The list will be revised annually and the methodology reviewed periodically. Implementation of the revised G-SIB standards will be phased in from 2016 and apply to the designated G-SIBs in 2014.

SIFI policy work through 2012 will focus on applying the SIFI framework to domestic systemically important banks and to systemically important nonbank financial entities. National implementation of the G-SIFI requirements, including progress on the resolution regimes, will be evaluated by a newly created Peer Review Council.

Resolution Regimes

Implementation of effective domestic and cross-border resolution regimes is a key component of the reform agenda. Following the July 2011 consultation,

Box 2.7. *(continued)*

the FSB in November released standards for effective resolution regimes (FSB, 2011c). It requires jurisdictions to have resolution authorities with a broad range of powers to resolve G-SIFIs (including nonbanks), to reduce impediments to cross-border cooperation, and to ensure that recovery and resolution plans and crisis management groups are in place, at least for banking groups that have been designated as G-SIFIs. Material progress has been achieved by many jurisdictions, including establishing cross-border crisis management groups. Full implementation, however, will depend on strong political commitment, as it will require legislation to, among other things, enhance cross-border cooperation and information sharing and extend the range and scope of resolution powers for financial groups in home and host jurisdictions.

Protecting Retail Banking

Further work is needed before rules and proposals aimed at limiting the scope of large banking groups can be implemented—in the United States, the "Volcker rule"; and in the United Kingdom, the proposals of the Independent Commission on Banking (ICB).

The Volcker rule (section 619 of the Dodd-Frank Act) bans proprietary trading and investments in private equity and hedge funds by U.S. banks, their domestic and overseas affiliates and bank holding companies, and by U.S.-based operations of foreign banks. The affected banks will be able to provide other services, including underwriting, market making, and risk-mitigating hedging activities. A narrow set of securities—debt issued by U.S. federal, state, and municipal governments, government-sponsored enterprises, and federal agencies—remains exempt from the ban on proprietary trading, but non-U.S. government bonds are not exempt. Non-U.S. banks can continue to engage in business activities prohibited by the rule so long as it is conducted outside the United States and does not involve engagement of U.S. residents and personnel. The Volcker rule presents several issues that need careful consideration to ensure a level playing field and avoid unintended consequences. In particular, potential implications for market liquidity and pricing of non-U.S. sovereign debt as well as for the activities of non-U.S. entities need to be further analyzed. Measures should be taken to avoid potential adverse implications, including clarification of the scope and coverage of the rules.

In the United Kingdom, the recommendations of the ICB were released in September 2011. If adopted by the U.K. authorities and if permitted under CRDIV, the proposals would require strict ring-fencing of retail banking to separate it from both global wholesale banking and investment banking for all banks in the United Kingdom; and a minimum level of capital and "bail-inable" debt for ring-fenced banks and G-SIBs of between 10.5 percent and 20 percent of risk-weighted assets, depending on their size and systemic importance. The ICB responded to industry feedback by allowing flexibility on both the timing (with a long phase-in period) and the ring fence (wholesale services for nonfinancial corporations in the European Economic Area can be included in the ring-fenced entity). Separation of retail from investment banking operations will undoubtedly make it easier to resolve the retail bank. However, without accompanying measures for tighter regulation, intensive supervision, and progress on cross-border resolution arrangements, ring-fencing will not be sufficient to ensure the financial stability of the banking groups.

Shadow Banking

Further progress has been achieved in establishing a broad framework for monitoring shadow banking. As broadly defined in an agreement issued in April 2011 (FSB, 2011a), shadow banking consists of all bank-like credit intermediation conducted outside of the banking sector that could give rise to regulatory arbitrage or systemic risk; the bank-like activities include maturity transformation, liquidity transformation, leverage, and risk transfer. Using this broad definition, the FSB's Shadow Banking Task Force in October 2011 set out high-level principles for effective monitoring and a process for mapping shadow banking using a common template for data collection (FSB, 2011d).

Through that report the FSB also committed to conduct annual shadow banking monitoring exercises to assess global trends and risks. The first monitoring exercise will take place in 2012, with

Box 2.7. *(continued)*

the results scheduled to be reported to the G20 in the fall. The October report also set out general principles for the regulation of shadow banking and identified five additional work streams: (1) banks' interactions with shadow banking entities (report due July 2012), (2) money market funds (due July 2012), (3) other shadow banking entities (due September 2012), (4) securitization (due July 2012), and (5) securities lending and repurchase agreements (due end-2012).

OTC Derivatives

The OTC derivatives reform program adopted in 2009 at the G20 Leaders' Pittsburgh Summit has been progressing very slowly. Achieving a sufficient degree of transparency and safety in derivatives markets is crucial for avoiding the destabilizing effects they evidenced in the first years of the crisis. The international standard-setting bodies have intensified work on developing policy and standards in this area: Reports were issued in quick succession in early 2012 by the International Organization of Securities Commissions (IOSCO) on requirements for trading (IOSCO, 2012a) and clearing (IOSCO, 2012b) and, with the Committee on Payment and Settlement Systems, the reporting of derivatives data (CPSS and IOSCO, 2012). In October 2011, the FSB said it would step up its own coordination of international policy work, and it subsequently established a senior-level coordination group.

Several FSB member jurisdictions have reached important legislative and regulatory milestones regarding OTC derivatives: in the European Union, the European Market Infrastructure Regulation (EMIR), approved in early 2012; in the United States, various rules aimed at implementing the Dodd-Frank Act; in Japan, the Financial Instruments Exchange Act (FIEA), revised in May 2010; and in Singapore, the Monetary Authority's consultation paper on the regulation of OTC derivatives (MAS, 2012). The EMIR, the revised FIEA, and the Dodd-Frank Act set out strong measures to improve the transparency, resilience, and regulatory oversight of the OTC derivatives markets; the measures include regulations for a clearing obligation for eligible OTC derivatives with provisions to reduce counterparty credit risk and operational risk for bilaterally cleared OTC derivatives; common rules for central counterparties; and a reporting requirement for OTC derivatives. Both the EMIR and Dodd-Frank provisions are expected to come into force during 2012, although there may be delays in the preparation of implementing measures. In parallel to national implementation, it is essential to ensure sufficient consistency among the various regimes to avoid overlaps, gaps, and conflicts that can be harmful to the achievement of the G20 goals.

Data Gaps

Addressing data and information gaps is necessary to improve the understanding of the global financial architecture and enable better monitoring of emerging risks and vulnerabilities that might threaten financial stability. Work to identify the data gaps and develop common data templates for G-SIBs is under way; key decisions on data requirements are due this year.

Credit Rating Agencies

Improving the regulatory oversight, governance, and transparency of credit rating agencies remains an important priority. The FSB called for reduced regulatory reliance on credit ratings in October 2010, but little progress has been made on this front. Developing alternative credit risk metrics that are objective and verifiable remains a challenge.

Summary

With many important policy goals in initial stages of implementation, the momentum of reform and the coherence of agreed policies must be sustained as implementation progresses. In particular, strong political commitment is essential to strengthen supervision while extending its scope to previously uncovered areas; to develop effective resolution regimes, including for cross-border firms; and to continue to address systemic risk across all financial sectors. The international financial institutions must remain vigilant and steadfast in their support for consistent and timely implementation.

Annex 2.1. Methodology for the EU Bank Deleveraging Exercise

The aim of the EU bank deleveraging exercise conducted for this GFSR was to assess the potential scale of asset reduction at EU banks and the potential impact on lending to the private sector, after taking into account banks' capital generation. The exercise used the balance sheet and profit data of 58 large EU banks included in the 2011 recapitalization exercise of the European Banking Authority (EBA).[20] The scale of deleveraging is assessed by simulating the balance sheet adjustments of the sample banks needed to achieve certain structural targets under three scenarios with varying amounts of cyclical pressure, such as sovereign stress and bank funding strains.

Dataset

The analysis relies on the detailed balance sheet data of the banks in the sample. The main balance sheet items—for both the assets and liabilities side of the balance sheet—plus data on profits and losses come from SNL Financial. Those data are supplemented with a geographic breakdown of loan portfolios and government bond holdings from the 2011 EBA stress test.[21]

For each bank, the total loans provided to a given country or region are divided into direct cross-border lending and lending by the bank's subsidiaries that are incorporated in that country or region. Data on individual subsidiaries in OECD countries and emerging markets are from Bankscope and bank regulators. Cross border lending is estimated as the difference between EBA total exposure of a sample bank to a given country and total loans of its subsidiaries in this country. Table 2.5 shows the key balance sheet items that are used in this exercise. Data on the level of core Tier 1 capital and risk-weighted assets are from the December 2012 EBA recapitalization exercise.[22]

Note: Prepared by Sergei Antoshin, Eugenio Cerutti, Jeanne Gobat, Anna Ilyina, and William Kerry.

[20]The banks are listed at the end of the annex.

[21]If EBA geographical breakdowns for a country or region were not reported for a bank despite its having operations in those areas, the breakdowns were obtained from bank-level data.

[22]Core Tier 1 capital is a subset of Tier 1 capital made up mainly of common shares and retained earnings.

Table 2.5. Selected Bank Balance Sheet Items

Assets	Funding Liabilities
1. Cash and equivalents	**1. Customer deposits**
2. Interbank loans	**2. Interbank deposits**
3. Securities	**3. Short-term debt**
Nongovernment securities	*Of which,*
Government bonds	Held by U.S. money market funds
Of which,	
Issued by country 1	
Issued by country 2 . . . etc.	
Other financial assets	
4. Customer loans	**4. Term debt**
In country 1	*Of which,*
Of which	Covered bonds
Direct cross-border loans	Senior unsecured
Subsidiaries loans	Subordinated debt
Residential mortgages	
Other consumer credit	
Commercial loans	
Other credit	
In country 2	
. . . etc.	

Framework

Scenarios

Three scenarios—underpinned by assumptions about the policy response to the euro area crisis—are considered.

- In the *current policies* scenario, sovereign spreads remain elevated and funding market pressures persist. Some banks are unable to roll over some of their term funding or are unable to access short-term U.S. dollar funding. A few institutions face a continuation of deposit outflows—although they are cushioned by the impact of the ECB's December and February three-year LTROs. Bank profits also remain under some pressure. The scenario also includes a trend toward a progressive increase in home bias within the euro area, characterized by diminished cross-border flows and increasing financial fragmentation along national lines.
- In the *complete policies* scenario, policymakers fully implement a comprehensive solution to the euro area debt crisis. This leads to a sharp tightening in sovereign spreads, a pronounced easing of funding market pressures, an increase in bank capital from private or public sources as funding markets fully open, and greater bank profits through a lowering of loan losses.

- In contrast, sovereign spreads increase in the *weak policies* scenario, and funding pressures intensify, overwhelming the two LTROs. Banks are unable to roll over a greater portion of debt coming due; they face further pressures in short-term markets and increased deposit outflows. Loan losses mount, reducing bank profitability. Markets also force banks to compress the time over which they reach structural targets, which amplifies deleveraging forces.

In each scenario, bank deleveraging is driven by a combination of structural targets and cyclical factors.

Structural Targets

The *structural* targets in this exercise reflect the key structural forces that are likely to shape banks' balance sheets over the medium term. These targets include : (1) stronger capitalization, modeled through a 9 percent core Tier 1 ratio; (2) lower reliance on less-stable (short-term, wholesale) sources of funding, proxied with an estimated net stable funding ratio (NSFR); and (3) other adjustments in banks' business models to adapt to the new regulatory and market environment (proxied by announced bank business plans).

The 9 percent core Tier 1 capital target. The target is based on the data published by the EBA for its recapitalization exercise that are consistent with Basel 2.5 methodology. Information on bank capital raising, liability management, and risk-weighted optimization has been used where available.

The NSFR. This target is estimated in line with the methodology used in Chapter 2 of the April 2011 GFSR. The NSFR is defined as a bank's available stable funding (ASF) divided by its required stable funding (RSF). In the scenarios, banks target an NSFR of 100 percent. The NSFR sets the proportion of long-term assets that should be funded by long-term, stable funding. The NSFR calculation is underpinned by a number of assumptions, including on the weights used for each of the components, which are set to broadly reflect the liquidity of banks' balance sheets (Table 2.6).

Bank business plans. Plans were collected from various sources, including banks' annual reports and presentations to investors (see Box 2.2).

The simulations cover September 2011 to December 2013, though banks are allowed varying time horizons to meet the structural targets. The core Tier 1 target is to be met in 2012 (in line with the EBA schedule), the restructuring plans in 2013, and the NSFR in 2018. For announced bank plans that extend beyond 2013, the exercise includes, pro rata, only the portion up to 2013. For the NSFR target, banks are assumed to adjust linearly, that is, 2/7 of the total required adjustment takes place during 2012–13 in the *current policies* and *complete policies* scenarios. This adjustment is accelerated in the *weak policies* scenario.

Cyclical Factors

Assumptions vary across the scenarios regarding two key cyclical factors: (1) bank funding conditions, and (2) bank capital generation. The latter incorporates retained earnings, which are a function of the degree of sovereign stress, macroeconomic conditions, and bank capital raising.

Funding pressures. These vary in the three scenarios through differing assumptions about strains in funding markets. Table 2.7 presents the weighted average rollover rates for banks in the scenarios for

Table 2.6. Weights Used in Calculation of the Net Stable Funding Ratio

Available Stable Funding	Weight	Required Stable Funding	Weight
Equity	1.00	Cash	0.00
Demand deposits	0.80	*Customer loans*	0.75
Savings and term deposits	0.85	*Residential mortgages*	1.00
Interbank deposits	0.00	*Corporate loans*	0.85
Repurchase agreements	0.00	*Interbank loans*	0.00
Short-term debt	0.00	*Trading and AFS securities*	0.20
Trading liabilities	0.00	Held to maturity	1.00
Other term debt maturing in 1 year or less	0.85	*Net derivative assets*	1.00
Term debt maturing in more than 1 year	1.00	*Other assets*	1.00
Other reserves	1.00	Reserves for NPL	1.00

Note: Weights for items in italics are IMF staff judgments. AFS = available for sale. NPL = nonperforming loans.

Table 2.7. Average Rollover Rates for Bank Funding under Three Policy Scenarios
(In percent)

Scenario	Customer Deposits	Interbank Deposits and Repurchase Agreeements	Short-Term U.S. Dollar Funding	Other Short-Term Funding	Unsecured Term Funding (due 2012–13)	Covered Bonds (due 2012–13)
Complete policies	100	100	100	100	100	100
Current policies	99	100	85	100	70	100
Weak policies	95	95	50	95	40	98

Source: IMF staff estimates.

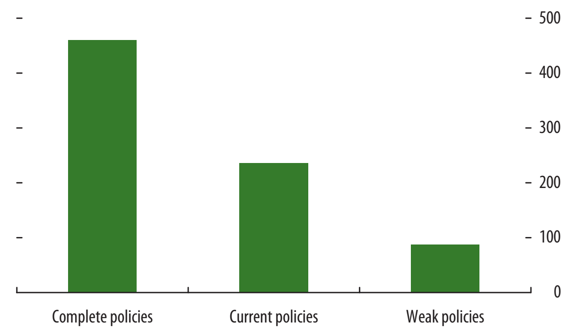
both wholesale and deposit funding. The average rollover rates in the current policies scenario have been informed by prevailing market conditions. The rollover rates applied in the scenarios vary across the banks in the sample. These funding strains are netted off against increases in bank capital over the two years, as well as against net liquidity from the December and February three-year LTROs used by banks to offset maturing debt. This netting also accounts for banks repaying the LTROs funding.

Bank capital generation. Profits and losses are based on a model that links retained earnings to macroeconomic conditions. Using dynamic panel models for various components of the income statement, we forecasted retained earnings on the basis of GDP growth.

In the *complete policies* scenario, profits are increased through an easing in sovereign pressures as gains are recorded on holdings of government bonds. Conversely, in the *weak policies* scenario, profits are adversely affected by the rise in sovereign stress. Mark-to-market gains and losses are calculated according to the evolution of sovereign spreads in the euro area countries between the spot rates in 2011:Q3 and the forward rates for 2013:Q4, calculated as of March 2012. The mark-to-market gains and losses are computed for sovereign and interbank exposures and are also channeled through the loan book as additional gains and losses on other private sector exposures (as described in Chapter 1 of the September 2011 GFSR).

In all three scenarios, the level of capital increases not only through retained earnings, but also through capital raising and liability management exercises that have occurred this year or are planned over the scenario horizon (Figure 2.54). In the *complete policies* scenario, banks are also able to raise capital to meet the core Tier 1 ratio target. The three scenarios

Figure 2.54. Capital Generation under Three Policy Scenarios
(In billions of U.S. dollars)



Source: IMF staff estimates.
Note: For a sample of 58 large EU banks.

also account for risk weight optimization when information is available.

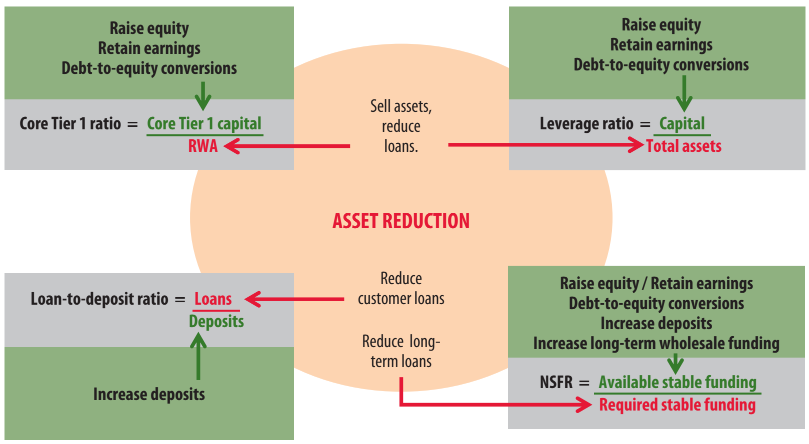
Amount of Deleveraging

Banks can strengthen their capital ratios by raising equity, retaining more earnings, or conducting liability management exercises (the green boxes in Figure 2.55). Similarly, banks can improve their structural funding ratios by shifting toward more stable sources of funding, such as deposits and more long-term wholesale funding. In an environment in which such measures are difficult or costly, banks may opt to reduce assets in order to achieve their structural targets.

Negative cyclical factors, such as bank funding conditions and sovereign stress, can lead to further deleveraging pressures (for example, some banks may be forced to scale back their activities because of the high cost of U.S. dollar funding or their inability to roll it over). If positive, cyclical factors can reduce deleveraging pressures.

For each sample bank, the total *required deleveraging* (asset reduction, after taking into account banks

Figure 2.55. How Can Banks Improve Capital and Liquidity Ratios?



Source: IMF.
Note: NSFR = net stable funding ratio.

capital generation) is determined by comparing the amounts and time frame of required deleveraging to achieve each of the structural targets (described above), as well as to close a (potential) funding gap.

The deleveraging is then implemented according to a bank-specific business plan, if such plan is available, or through a generic deleveraging strategy.

Deleveraging Strategy

In the absence of detailed information on restructuring plans, banks are assumed to follow a generic deleveraging strategy. Under that strategy, banks are assumed to reduce assets according to a predetermined *pecking order* (Table 2.8) in which they consider selling nongovernment securities and foreign government securities before turning to loans. With regard to the loan portfolio, the deleveraging strategy is assumed to have a built-in home or regional bias. This means that loan books are first reduced outside the advanced EU economies, then in advanced EU economies (outside the home country), and finally in the home country. Within each of these country "buckets", the deleveraging order depends on risk weights—higher risk weight exposures are reduced before lower risk weight exposures (Table 2.8). The latter means that banks seek to achieve their capital targets through minimal reduction in total assets. Furthermore, the strategy is designed to protect consumer lending in general and domestic lending in particular, as it forces banks to reduce other assets first.

The deleveraging strategy is based on observed bank behavior. The assumed pecking order for securities and commercial banking activities reflects what has happened to date—with a number of European banks scaling back their noncore and dollar-funded activities and banks publicly announcing their business plans—as well as banks' likely reaction to the increase in risk weights under Basel 2.5. The regional or home bias is visible, to some extent, in the evolution of banks' private sector foreign claims during 2011:Q3 (see Figure 2.25).

To ensure that banks continue to hold a minimum level of liquid assets for microprudential purposes, it is assumed that securities and interbank loans are reduced in proportion to total assets. In addition, to ensure that there are no discounts or premiums on asset sales (and hence, no second-round effects on other banks), the cutbacks in securities and interbank claims are capped as a percentage of exposures for each bank (Table 2.8). Thus, banks with large investment banking activities have more room to reduce assets before getting to the loan portfolios.

Finally, when deciding on the reduction of foreign loan books, banks take into account their funding

Table 2.8. Bank Deleveraging Strategy

Pecking Order—Highest to Lowest Priority	Action
1. Nongovernment securities	Reduce in proportion to total assets up to 10 percent of nongovernment securities
2. Foreign government bonds	Reduce up to 10 percent of foreign government bonds
3. Interbank loans	Reduce in proportion to total assets up to 10 percent of total interbank loans
4. Noncore assets	Sell up to 100 percent of noncore assets
5. Customer loans[1]	
5.1. Cross-border loans outside advanced EU economies 5.2. Subsidiaries' loans outside advanced EU economies 5.3. Cross-border loans to advanced EU economies (outside home country) 5.4. Subsidiaries' loans in advanced EU economies (outside home country)	Roll off maturing loans, but only up to the point at which the rolloff amount is less than or equal to loans minus deposits. For cross-border loans, this calculation is performed at the parent bank level. For subsidiaries' loans, the calculation is performed at the subsidiary level.[2]
5.5. Domestic loans	Roll off maturing loans

[1]The order in which country exposures are considered within each of the categories is based on risk weights computed using the Basel II standardized approach. Higher risk-weight exposures are reduced first.

[2]In cases where loan rolloffs are insufficient to meet the deleveraging target, the bank can consider selling subsidiaries before reducing domestic loans, provided that such sale does not lead to a reduction in the bank's capital ratio given bank valuations prevailing in the local market (i.e., the price-to-book ratio of the banking equity index in a given country).

structure—that is, a stock of loans, x percent of which is funded by local deposits, cannot be reduced by more than $(100 - x)$ percent.

Impact on EU Country Credit

Although the exercise is based on a sample of large EU banks, the results shown in Figures 2.32 and 2.33 are extended to the entire banking system so that they can be compared with macroeconomic data. This extension was done as follows:

- Compute the *out-of-sample credit* for each country. Out-of-sample credit in country X = domestic credit in country X – (sample credit in country X – cross-border credit in country X).
- Compute the *impact of out-of-sample banks* on domestic credit in each country using a weighted average of representative sample banks' percentage cut in credit to the level of out-of-sample credit.
- Compute the impact of *out-of-sample banks* on cross-border credit on a borrowing country. Apply the "average sample bank's" percentage reduction in cross-border credit to the level of out-of-sample cross-border credit for the same borrower country or region.
- Compute the final *impact on credit* in each country. Impact on credit in country X = change in sample bank credit (both domestic and cross-border) in country X + change in out-of-sample domestic credit in country X + change in out-of-sample cross-border credit in country X.

Banks Included in the Exercise

Austria
Erste Group Bank AG
Raiffeisen Zentralbank Österreich AG

Belgium
Dexia SA
KBC Group NV

Cyprus
Marfin Popular Bank Public Company Limited
Bank of Cyprus Public Company Limited

Denmark
Danske Bank A/S
Jyske Bank A/S
Sydbank A/S

Finland
OP-Pohjola Group Central Cooperative

France
BNP Paribas SA
Crédit Agricole SA
BPCE
Société Générale SA

Germany
Deutsche Bank AG
Commerzbank AG
Landesbank Baden-Württemberg
Deutsche Zentral-Genossenschaftsbank AG
Bayerische Landesbank
NORD/LB Norddeutsche Landesbank Girozentrale
WestLB AG
HSH Nordbank AG
Landesbank Berlin Holding AG
DekaBank Deutsche Girozentrale
Westdeutsche Genossenschafts-Zentralbank AG

Hungary
OTP Bank Nyrt

Ireland
Allied Irish Banks Plc
Bank of Ireland

Italy
Intesa Sanpaolo SpA
UniCredit SpA
Banca Monte dei Paschi di Siena SpA
Banco Popolare Società Cooperativa
Unione di Banche Italiane SCpA

Luxembourg
Banque et Caisse d'Epargne de l'Etat, Luxembourg

Netherlands
ING Bank N.V.
Rabobank Group
ABN AMRO Group NV
SNS Bank NV

Poland
PKO Bank Polski SA

Portugal
Caixa Geral de Depósitos SA
Banco Comercial Português SA
Banco Espírito Santo SA
Banco BPI SA

Slovenia
Nova Ljubljanska Banka d.d.
Nova Kreditna banka Maribor d.d.

Spain
Banco Santander SA
Banco Bilbao Vizcaya Argentaria SA
BFA BANKIA
Caja de Ahorros y Pensiones de Barcelona
Banco Popular Español SA

Sweden
Nordea Bank AB
Skandinaviska Enskilda Banken AB
Svenska Handelsbanken AB
Swedbank AB

United Kingdom
Royal Bank of Scotland Group Plc
HSBC Holdings Plc
Barclays Plc
Lloyds Banking Group Plc

Annex 2.2. Sovereign Risk in the United States, Japan, and Germany—Signals from the Markets

This annex summarizes financial market indicators used by investors to assess sovereign risk, from January 2009 to the present for the United States (Figure 2.56), Germany (Figure 2.57), and Japan (Figure 2.58). For each country, it also compares current readings with those for a recent crisis period relevant to that country: September 2011 for the United States, January 2010 for Germany, and mid-March to mid-April 2011 for Japan. Although markets can understate or overstate risk, and prices may sometimes reflect short-term technical factors rather than fundamentals, these measures as a group provide a snapshot of broad financial market sentiment regarding the sovereign risk of these countries.

United States

U.S. sovereign risk concerns have eased significantly since the budget crisis of 2011: Investors treated U.S. markets as a safe haven in the midst of the EU crisis, and U.S. assets outperformed most peers globally last year. The relative strength of recent U.S. economic activity reinforced this sanguine view. However, significant risks remain, as medium-term fiscal reforms remain unresolved, and political gridlock persists.

Overall, risk levels have declined since the beginning of September 2011 (Figure 2.56). Fixed income indicators such as cash and forward yield curve spreads have fallen as fears related to the budget crisis subsided, and yields on Treasury inflation-protected securities (TIPS) indicate that investors are not worried about either inflationary or deflationary scenarios at present. The spread between 10-year Treasuries and the bund is higher, but this reflects heavy flight-to-quality buying of bunds in response to the EU crisis rather than a negative view of the United States relative to Germany. In derivatives markets, long- and short-dated CDS spreads have fallen, and the interest rate swap curve has flattened. The dollar has strengthened, and gold has fallen from its peak of last year. Funding markets are calm, Treasury auctions have proceeded smoothly, and liquidity has been good.

Note: Prepared by Sanjay Hazarika and Martin Edmonds.

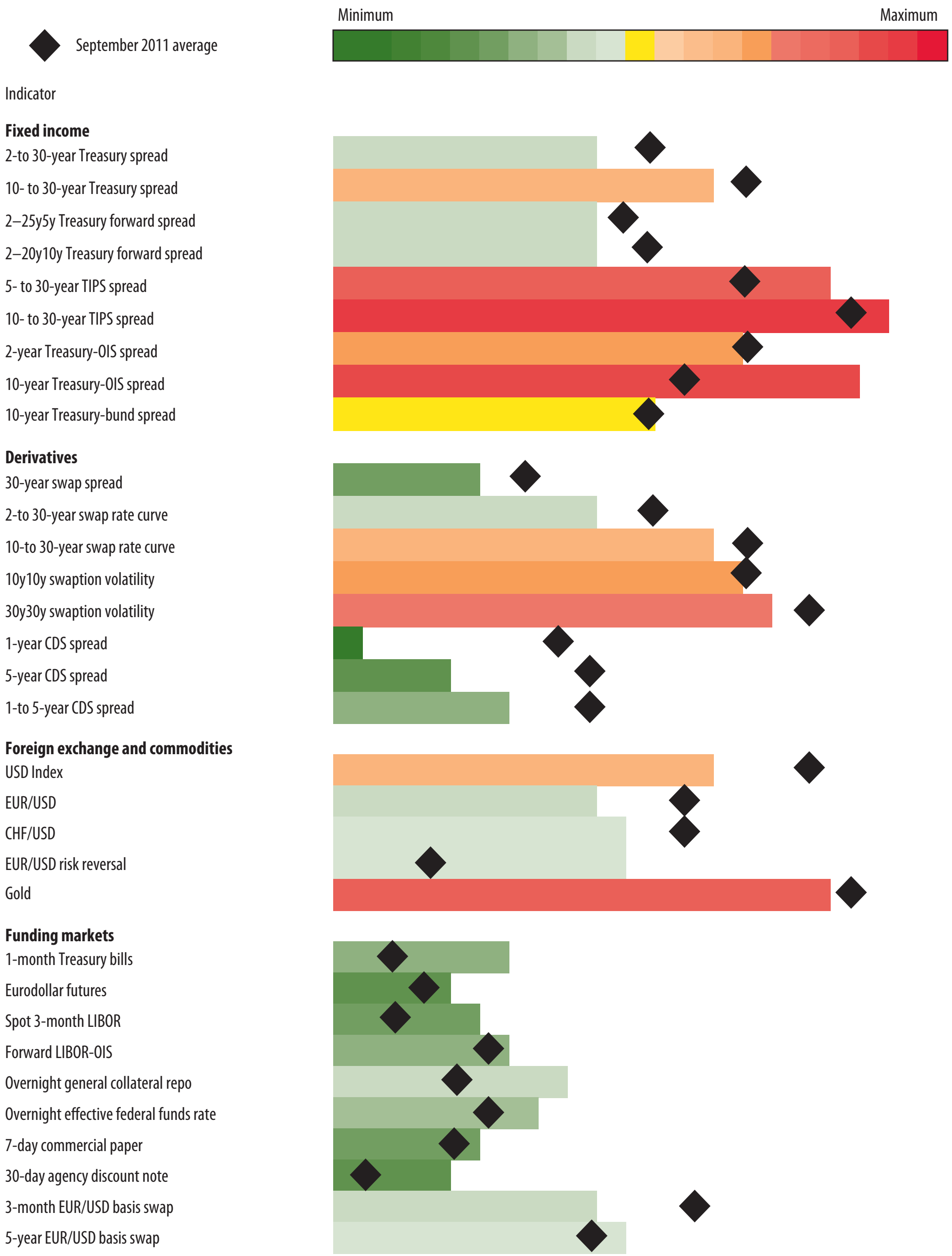
Nevertheless, significant risks remain. The lack of progress on medium-term fiscal consolidation (especially tax reform and reining in health care and pension costs) is a continuing concern (see Chapter 1, Table 1.1, which compares indebtedness in selected advanced economies; and Table 2.1 for sovereign vulnerability indicators). The Bush-era tax cuts will expire on December 31, and a range of automatic spending cuts are scheduled to kick in, which could derail the economic recovery. Low interest rates and falling unemployment may create a false sense of security and cause partisan gridlock to persist. Elevated long-dated swaption volatilities hint at continued worries about tail risks.

Germany

In November and December 2011, during the height of the euro area turmoil, German markets were a safe haven for investors, and local fixed-income markets outperformed their peers. The ECB's announcement of its three-year LTROs on December 8 led to a recovery in markets for sovereign securities from the periphery of the euro area. But German spreads remain at tight levels, and rates remain very low, indicating that Germany remains a safe haven and that fears about policy persist. However, as investors' attention moves to the future, there is a risk that if Germany broadens its support for the peripheral euro area, it could drive speculation about its own fiscal stability and thus pressure its own markets (see Tables 1.1 and 2.1).

Current market levels present a generally positive picture relative to January 2010 (the pre-EU crisis period), with most sectors indicating lower risk levels (Figure 2.57). Interest rates are generally lower across the board because the market for German government bonds has benefited from large safe haven flows. Derivatives present a more mixed picture: Interest rate swap rates are lower and the swap curve flatter in response to ECB policy, but swaptions volatility remains high in response to market worries about the EU reform package. In addition, German CDS spreads are higher, although they have recovered from the wide levels seen last year, and the euro remains under pressure. However, local funding conditions are nearly back at precrisis levels, and dollar funding has improved.

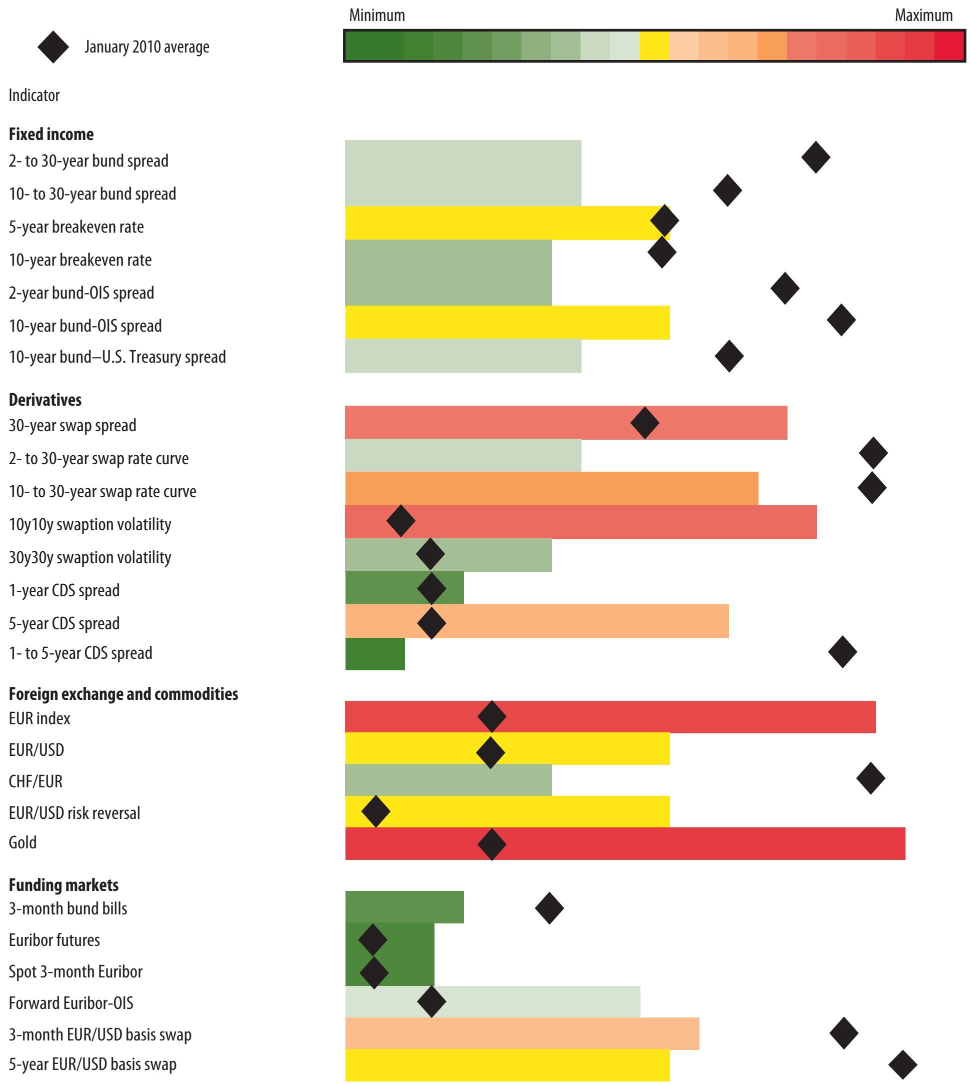
Figure 2.56. United States: Sovereign Market Indicators, March 2012



Sources: Bloomberg L.P.; and IMF staff estimates.

Note: For each indicator of sovereign risk, the color of the bar shows its current market value (the average for the month from mid-February to March 13, 2012) in relation to the range of daily readings it took during the *reference period* from January 1, 2009, to the same end date. The reference period roughly covers the transformation of the financial crisis into more of a sovereign credit crisis, and hence the indicators during that period registered a wide range of values for perceptions of sovereign risk. Shades of green signify that the current value is closer to the reference-period level that represented the greatest complacency regarding sovereign risk; shades of red signify a current value closer to the reference-period level representing the greatest alarm. CDS = credit default swaps. LIBOR = London interbank offered rate. OIS = overnight indexed swap. TIPS = Treasury inflation-protected securities.

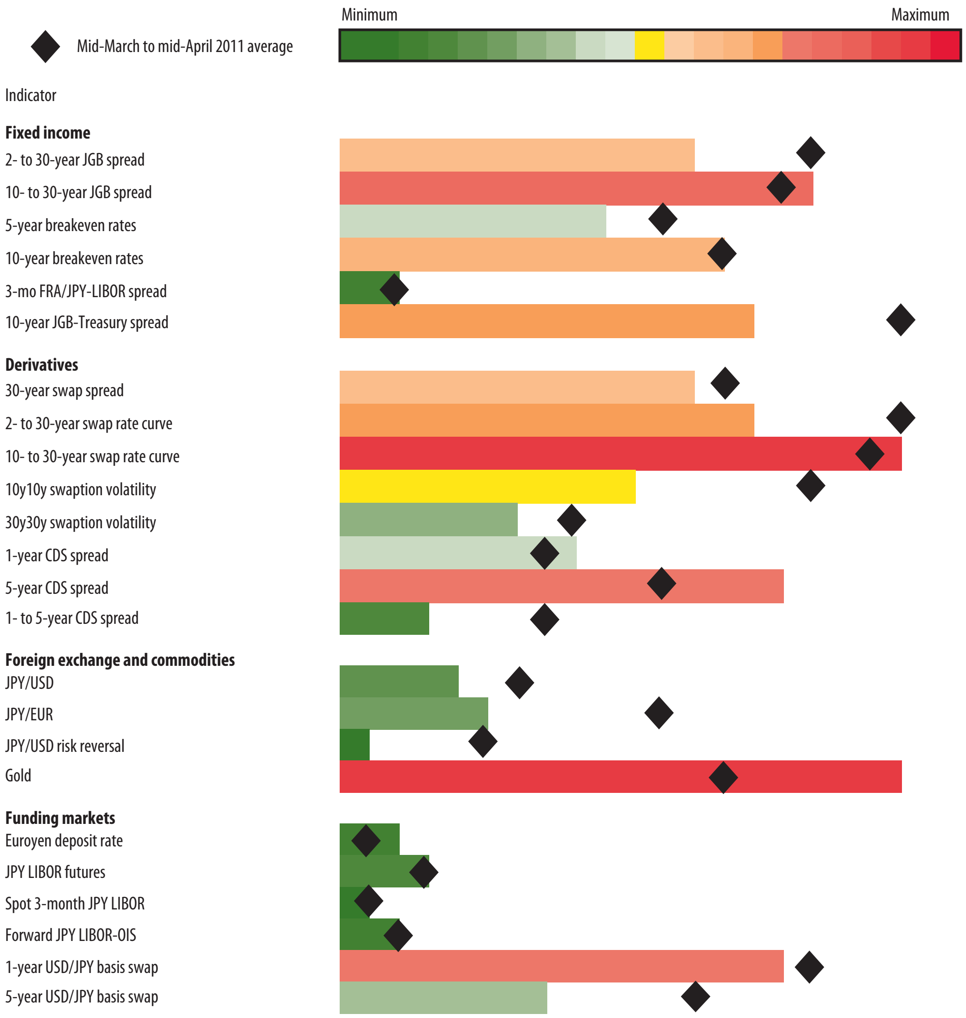
Figure 2.57. Germany: Sovereign Market Indicators, March 2012



Sources: Bloomberg L.P.; and IMF staff estimates.

Note: For each indicator of sovereign risk, the color of the bar shows its current market value (the average for the month from mid-February to March 13, 2012) in relation to the range of daily readings it took during the *reference period* from January 1, 2009, to the same end date. The reference period roughly covers the transformation of the financial crisis into more of a sovereign credit crisis, and hence the indicators during that period registered a wide range of values for perceptions of sovereign risk. Shades of green signify that the current value is closer to the reference-period level that represented the greatest complacency regarding sovereign risk; shades of red signify a current value closer to the reference-period level representing the greatest alarm.CDS = credit default swaps. Euribor = euro interbank offered rate. OIS = overnight indexed swap.

Figure 2.58. Japan: Sovereign Market Indicators, March 2012



Sources: Bloomberg L.P.; and IMF staff estimates.
Note: For each indicator of sovereign risk, the color of the bar shows its current market value (the average for the month from mid-February to March 13, 2012) in relation to the range of daily readings it took during the *reference period* from January 1, 2009, to the same end date. The reference period roughly covers the transformation of the financial crisis into more of a sovereign credit crisis, and hence the indicators during that period registered a wide range of values for perceptions of sovereign risk. Shades of green signify that the current value is closer to the reference-period level that represented the greatest complacency regarding sovereign risk; shades of red signify a current value closer to the reference-period level representing the greatest alarm. FRA = forward rate agreement. JGB = Japanese government bonds. LIBOR = London interbank offered rate. OIS = overnight indexed swap.

The primary risk comes from perceptions that euro area stability actions adopted by the EU may raise concerns about the fiscal position of Germany itself. The potential for credit downgrades and a reversal of safe haven flows from Germany out of the euro area altogether (that is, to the United States or Japan) could lead to pressure on German government bonds and related markets.

Japan

Events in Japan over the past year were obviously dominated by its reaction to and recovery from the earthquake. Overall economic performance has yet to recover, and equity markets remain well below the levels seen before the tragedy; but the relatively benign state of fixed-income and derivatives markets suggests that there are few immediate concerns. The key short-term risk is a continued strengthening of the yen, while concern about the overall debt level remains a medium-term risk.

In fixed-income markets, the spread to U.S. Treasuries has declined from the time of the earthquake (mid-March to mid-April 2011), while the Japanese government bond yield curve has flattened (except at the very long end) (Figure 2.58). Derivatives market signals are also generally positive, although CDS spreads have widened along with those of Germany, the United States, and other countries. The yen is a key concern due to its effect on prospects for exporters, as continued yen strength is believed to exacerbate the headwinds caused by the earthquake. From a longer-term perspective, the overall government debt level remains a worry, and Japanese markets remain vulnerable to a sharp rise in bond yields (see Tables 1.2 and 1.3).

Annex 2.3. Developments in U.S. Housing Markets

The depressed U.S. housing market has weighed significantly on the overall economy. Implementation of more-effective housing policies would help reduce foreclosures and hasten the recovery of both the housing market and the broader economy.

Instead of powering the economy as it has done after past recessions, the U.S. housing market has remained depressed since the Great Recession. This persistent weakness reflects the difficulty of adjustment after years of excessive increases in homeownership and home building. The number of excess housing units is currently estimated to be about 2 million, down from 5 million in 2008 because of anemic construction rates over the period.

Beyond its direct effect on GDP, lower residential investment has also affected the overall recovery through the worsening of household balance sheets and the accumulation of mortgage-related losses by banks and other investors.

Downside risks to housing remain elevated in light of a still-unsettled economic outlook and a large shadow inventory of homes.[23] An estimated 3.7 million properties now in the shadow inventory could end up in distress sales within three to four years. Foreclosed properties often sell at a discount of as much as 27 percent (Campbell, Giglio, and Pathak, 2011), and foreclosed properties dampen neighboring prices by 1½ to 2 percent (Hartley, 2011). A recent legal settlement that resolved claims about improper foreclosures and lending abuses could imply more foreclosures in the short run due to an inventory of pending cases. Over the longer term, however, the settlement could lead to a nontrivial reduction in foreclosures through as much as $17 billion in relief for struggling homeowners.[24]

The likelihood of only a slow recovery in the housing market, even under a favorable economic scenario, warrants policies to prevent a lengthy period of high foreclosure rates and elevated uncertainty on house prices. The existing federally sponsored programs to support the housing market—the Home Mortgage Modification Program (HAMP) and the Home Affordable Refinancing Program (HARP)—have so far had only a muted impact on the foreclosure crisis; but recent actions and proposals could potentially enhance their effectiveness.

The modification program, HAMP, is aimed at reducing delinquent and at-risk homeowners' monthly mortgage payments through modifications of the terms of their home mortgage. It has resulted in only about 0.95 million permanent modifications since its inception in April 2009. The authorities recently announced forthcoming enhancements to the program. Analysts judge that these enhancements could produce about 0.5 to 1 million additional modifications, which would have an appreciable impact on the foreclosure rate.[25] Incentives to lenders to offer principal reductions will be tripled and will be extended to the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac, whose participation would make the impact of the program much more significant.

The refinancing program, HARP, is aimed at homeowners whose mortgages have high loan-to-value (LTV) ratios and are guaranteed or owned by the GSEs. The program has generated about 1 million refinancings since April 2009; but an estimated 8 million homeowners in the United States still have underwater mortgages (the market value of the property is less than the outstanding loan balance) at above-market interest rates. While the GSEs made some enhancements to the program in December 2011 to broaden its reach, the new measures appear insufficient to stimulate a large increase in refinancing.

More recently the Obama administration announced a legislative proposal to broaden access to refinancing for both non-GSE and GSE mortgages.[26] If effectively implemented, the expansion could potentially lead to additional refinancings

Note: Prepared by Jihad Dagher.

[23]The shadow inventory comprises homes not listed for sale that either have mortgages that have been delinquent for more than 60 days or have severely underwater mortgages that are at a high risk of delinquency.

[24]Under the settlement, banks should allocate at least $10 billion toward principal reduction. Depending on how this is allocated between modifying own loans and private-label loans they service, the overall impact could range between $10 billion and $34 billion in principal reduction.

[25]See IMF (2011) for a discussion of the potential impact of expanded modification programs on foreclosures and house prices.

[26]The proposal would refinance non-GSE loans through a streamlined program operated by the Federal Housing Administration and financed through a fee on the largest financial institutions (at an estimated $5–$10 billion in total cost).

of about 5 million loans. That would create about $10 billion in savings on mortgage payments in the first year and potentially stem more than 150 thousand foreclosures; together, those effects could result in appreciable improvement in house prices of between ½ and 1 percent by 2014.[27] However, the proposal in its current form is not expected to be approved by Congress.

[27]According to Remy, Lucas, and Moore (2011), an expansion of the refinancing program to GSE borrowers could result in about 3 million incremental refinancings. According to a recent Federal Reserve white paper on housing (BGFRS, 2012a), 1–2½ million non-GSE borrowers with high LTV ratios could qualify for refinancing if HARP were to be expanded to the non-GSE universe.

The Federal Housing Finance Agency (the regulator of the GSEs), also aiming to relieve downward pressures on housing, is setting up a program that helps transition foreclosed houses into rental housing, in the hope that this will minimize the negative impact of foreclosures on neighboring properties. This will also help expand the stock of rental housing at a time when demand for rental units is on the rise.

Finally, a further policy that could be considered would be to allow mortgages to be modified in courts ("cramdowns"). Cramdowns would help reduce foreclosures also by inducing voluntary principal reduction by banks (see IMF, 2011).

Annex 2.4. The ECB's LTROs: Keeping the Benefits and Avoiding the Pitfalls

The ECB's recent longer-term refinancing operations (LTROs) stemmed the escalation of market tensions in the euro area and bought valuable time to put in place a more durable stability. The LTROs were effective in removing systemic liquidity and funding pressures, bringing sovereign yields down, and avoiding a potential bank failure. Like any powerful medicine, the LTROs have some drawbacks and side effects, but there is also scope for mitigating these risks. The main risk is a sense of complacency, which could tempt governments to ease the pace and depth of needed fiscal, financial, and structural reforms.

In late 2011, the euro area and the global financial system were facing strong pressures. With interbank funding essentially frozen and sovereign yields widening to record high levels, a full-blown bank crisis was in the making. The consequences could have exceeded those experienced in the aftermath of the Lehman bankruptcy in 2008, threatening to bring capital markets and the international banking system to a halt and raising the specter of a global economic downturn.

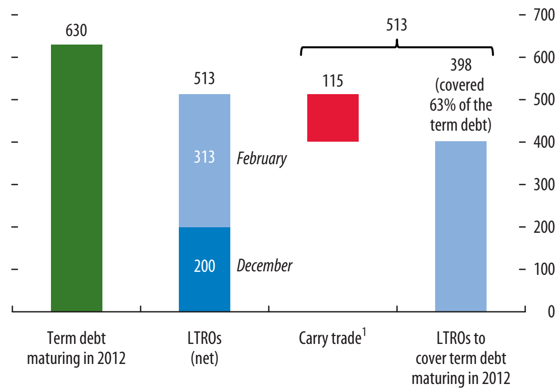
The ECB's LTROs helped to prevent the escalation of the crisis and have bought valuable time to establish a more durable stability. In the absence of adequate institutional firewalls and backstops, the ECB stood out as the only institution with the credibility and means to prevent a financial meltdown. By providing €1 trillion in funding to banks, it helped stabilize markets and prevented a systemic crisis by:

- *Easing bank funding pressures and enabling euro area banks to refinance maturing debt.* LTRO funding covers more than 60 percent of banks' debt maturing in 2012 (Figure 2.59). More importantly, as funding pressures have eased, bank funding markets have partly reopened. Euro area banks were able to place €22 billion in senior unsecured debt during January 2012, and even some mid-tier peripheral banks were able to raise funding. The easing of collateral requirements ensured that small and medium-sized banks could also benefit from access to ECB funding. With funding pressures receding, the risk of a sudden reduction in credit growth hurting the real economy has decreased substantially. Some 800 banks participated in the most recent LTROs, giving cause for optimism that this second round of increased liquidity would find its way into the real economy, particularly for small and medium-sized enterprises.
- *Driving sovereign yields down (Figure 2.60) and reducing the likelihood of generalized bank runs.* Banks in the peripheral euro area, especially Italy and Spain, have used some of the proceeds from the first liquidity injection (reportedly also from the second round of LTROs) to purchase their own domestic sovereign debt, supporting bank earnings and helping to compress yields. Euro area banks' holdings of government securities increased by about €115 billion from end-November 2011 to February 2011 (Figure 2.59), or about one-fifth of the total LTROs over that period.
- *Restoring market confidence by reassuring market participants that the ECB has both the resources and the will to contain the crisis.* Risk assets—equities and corporate credit—rallied following the LTROs allotments.

Like a powerful medicine, the LTROs have side effects and thus are subject to a health warning.

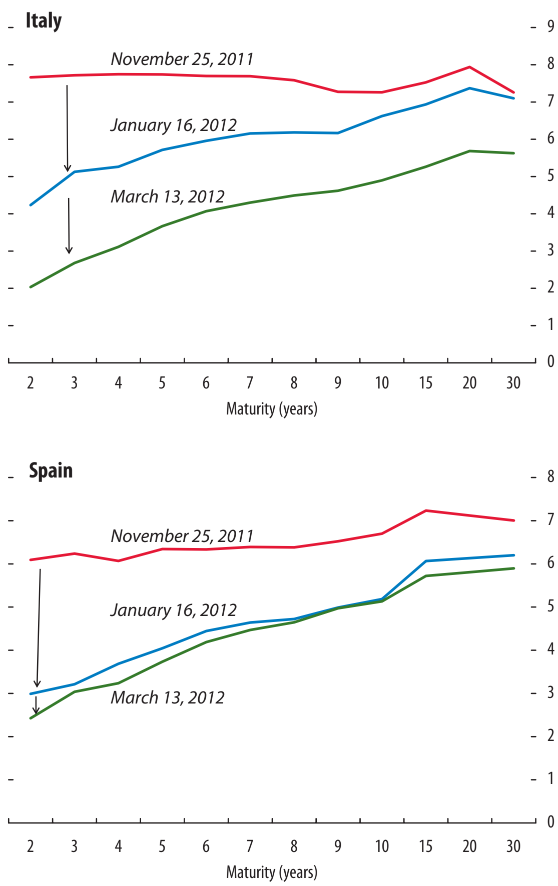
Note: Prepared by Jorge A. Chan-Lau, Tommaso Mancini Griffoli, Mark Stone, Giovanni Dell'Ariccia, Luc Laeven, Alasdair Scott, and Nico Valckx.

Figure 2.59. ECB LTROs and Bank Term Funding
(In billions of euros)



Sources: Dealogic; ECB; and IMF staff estimates.
Note: LTROs = longer-term refinancing operations.
[1]The change in euro area monetary and financial institutions' holdings of government bonds from end-November 2011 to February 2012.

Figure 2.60. Sovereign Bond Yields for Italy and Spain
(In percent)



Source: Bloomberg L.P.

The main drawbacks of the LTROs are listed below, along with the possibilities for mitigating them.

- *Reinforcing linkages between banks and sovereigns*. As noted, banks have used LTROs financing (about one-fifth of it) to purchase sovereign bonds (and tending to do so in their own national markets). As a consequence, exposure to sovereign bonds has increased. This risk would be less of a concern if sovereign yields remained at sustainable levels and bank funding normalized—in other words, in the complete policies scenario discussed in this GFSR.
- *Supporting weak banks that have nonviable business models instead of resolving them*. This effect could undermine credit growth, and ultimately GDP growth, and perpetuate risks to sovereign solvency. But rigorous and detailed supervision and resolution regimes, both at the euro area and national level, should mitigate this risk and ensure that support goes to solvent institutions undergoing liquidity problems. The importance of strengthening supervision and resolution should not be underestimated, as it would facilitate the orderly unwinding of ECB funding when economic and financial conditions normalize.
- *Concerns that the large expansion of the ECB balance sheet will lead to inflation*. However, the relatively large output gap, well-anchored inflationary expectations, and the temporary nature of the LTROs mean that this risk is not material at present; and it is unlikely to be significant for some time, given weak prospects for demand growth in the euro area because of widespread fiscal consolidation and deleveraging. The ECB also has ample fine-tuning instruments available to respond to any emerging inflationary pressures.

Potentially a more serious concern is policy complacency. Any sense of "mission accomplished" could weaken the resolve to undertake reforms necessary to address the underlying causes of the crisis. Policymakers and private sector financial institutions should continue to focus their efforts on strengthening banks' balance sheets to gradually reduce dependence on central bank funding.

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Document: FEWG 32-017A
Draft: **FIRST**
Source: ABAC Australia
Date: 9 May 2012
Meeting: Kuala Lumpur, Malaysia

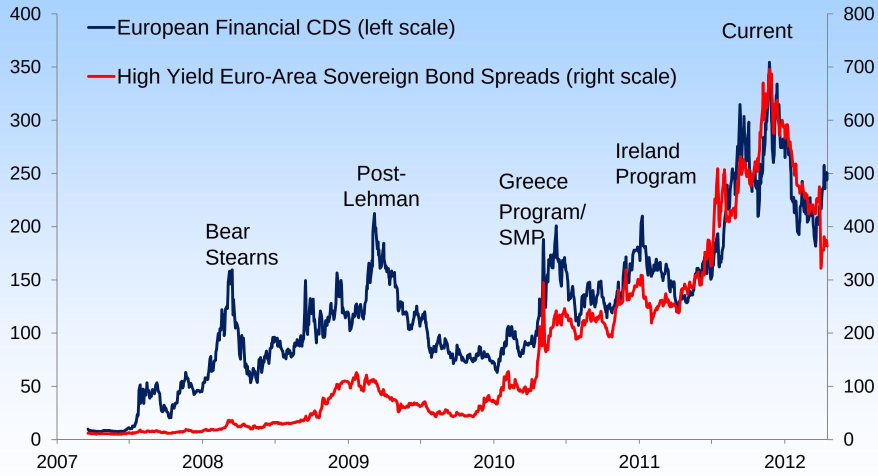
The Euro Area Crisis and Spillovers into Emerging Markets

R. Sean Craig
IMF Resident Representatives in Hong Kong SAR

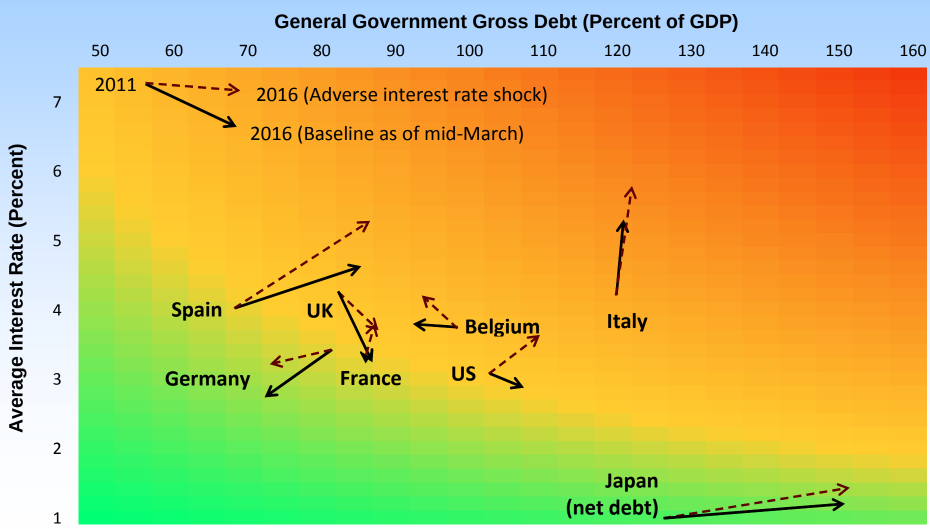
APEC Business Advisory Council
Finance and Economics Working Group
Kuala Lumpur, Malaysia
May 22nd, 2012

Disclaimer: views expressed are those of the author and not necessarily of the IMF

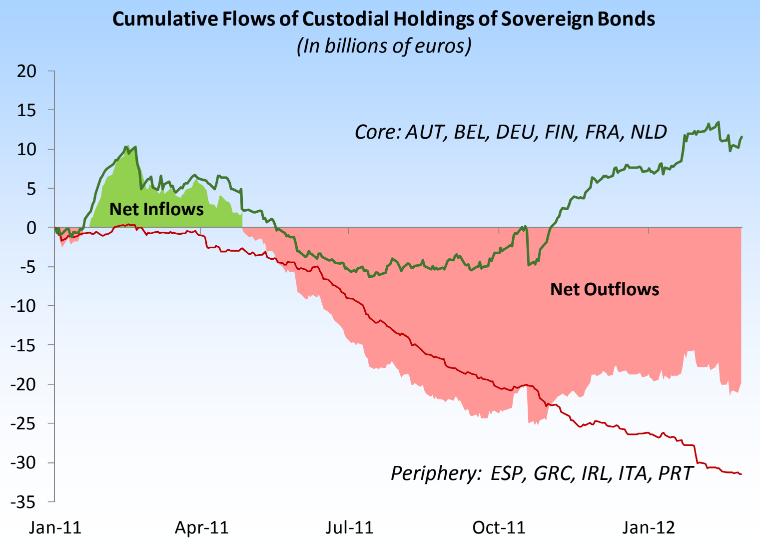
Sovereign and bank risk have become more closely linked so policy must address both…



…as strained public finances keep sovereigns vulnerable to interest rate shocks…



…and still-large funding needs meets a diminishing investor base…

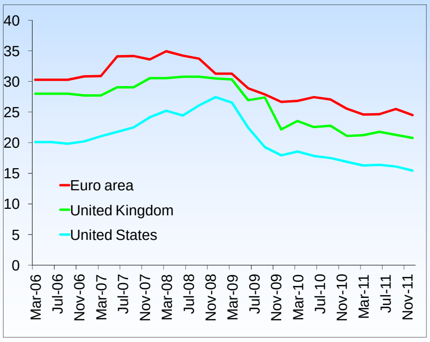


…prompting emergency ECB funding support that stabilized the situation

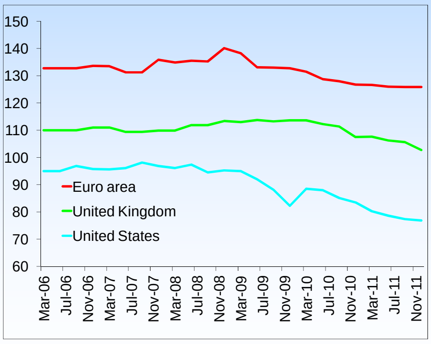
- Rise in sovereign yields leads to unsustainable debt burden and negative feedback loop
- ECB lent €1 tn in 3-year funds to banks
  - Replacing market funding that had become scarce
  - Averting severe liquidity and credit crunch
  - Prompting bank purchases of government bonds
- Only buys time for fundamental fiscal reform and for banks to deleverage

Banks in Europe did not use the opportunity deleverage and address funding concerns…

Bank Leverage
(Adjusted tangible assets to Tier 1 common capital)



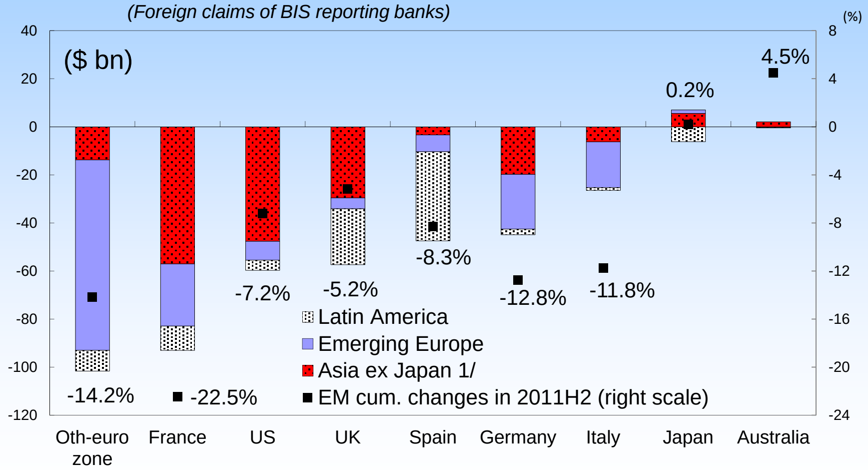
Bank Loan-to-Deposit Ratios
(Loans as a percentage of deposits)



…and now the crisis has triggered a sharp deleveraging in 2011 H2 that is set to continue

Deleveraging by Country in Emerging Markets, 2011 H2

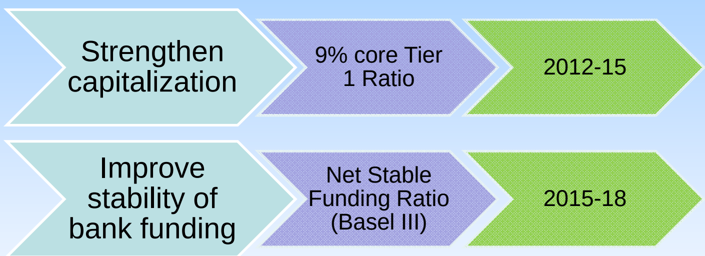
(Foreign claims of BIS reporting banks)



Sources: BIS Consolidated Statistics; and IMF staff estimates.
1/ Asia ex Japan includes East and South Asian economies (excluding Japan).

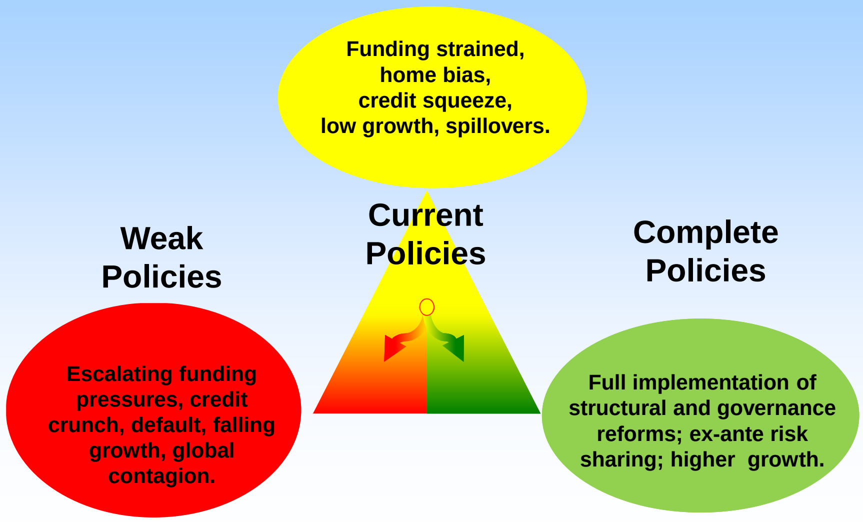
...with the extent of deleveraging increasingly driven by structural policies – i.e., Basel III

Structural pressures on banks to deleverage…



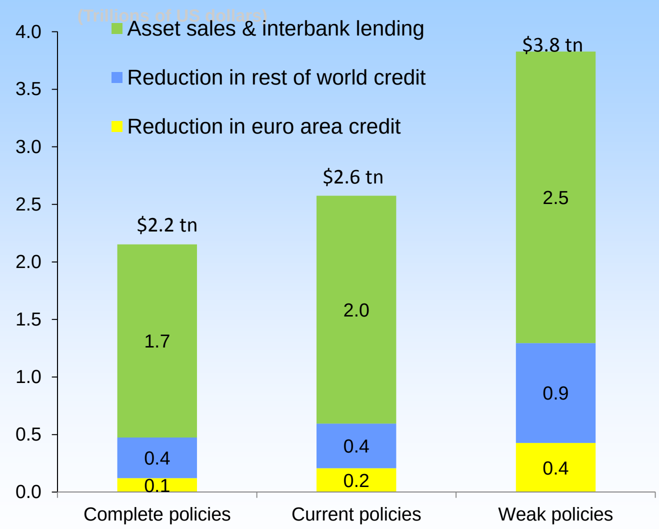
… will reinforce cyclical and funding drivers of bank deleveraging

…with the extent of bank deleveraging determined by quality of the policy response.



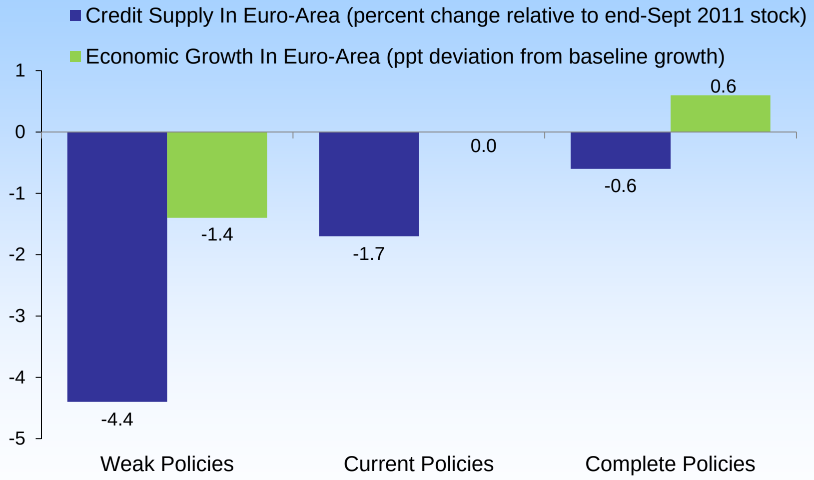
Deleveraging mostly assets sales w/ some credit

(after taking into account capital raising; end-Sept 2011 to end-2013)



Note: Sample of 58 large EU banks (at least 50% of each country's banking system)

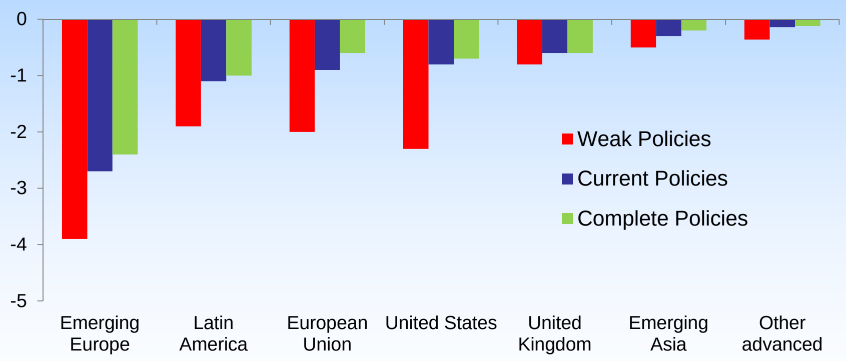
…and the impact on euro area credit and GDP growth dependent on the quality of policies



Note: This chart is based on an extrapolation of the results from a sample of 58 EU banks to the banking systems. The impact on GDP is assessed using the IMF's Global Economy Model; end-Sept 2011 to end-2013

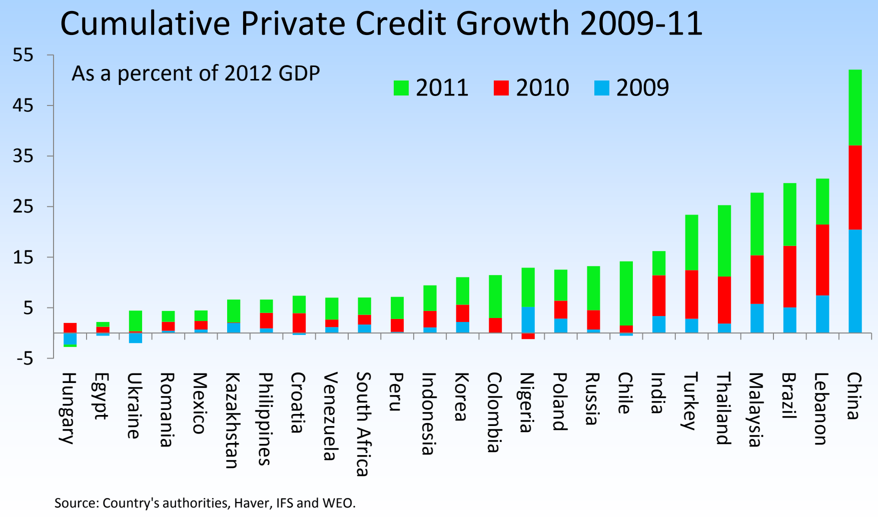
…with spillovers to the rest of the world strongest in emerging Europe and Latin America

Impact of EU Bank Deleveraging Sample Banks' Lending Supply Globally
(in percent of total bank credit ; end-Sept 2011 to end-2013)

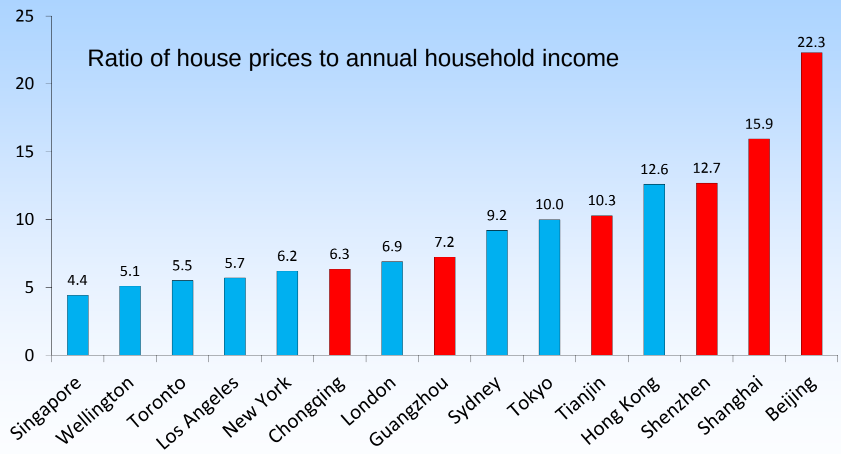


Note: Based on the sample of 58 large EU banks (at least 50% of each country's banking system)

Emerging markets have been resilient in this crisis but face home grown vulnerabilities



…with sharp increases in credit/GDP and property prices key sources of vulnerability



Policy challenges are greatest in the Euro area…

Euro Area — Room for maneuver is limited And shrinking;

National:
- Implementation is key – build credibility with markets

Banking:
- Macro-prudential focus of policy on deleveraging (e.g. Vienna 2)
- Recap/restructure/resolve; use public money if needed

Firewall:
- Allow taking direct stakes in banks - flexibility

"More & Better Europe":
- Roadmap to further integration:
  - Financial: Pan-European supervision and resolution
  - Fiscal: Ex-ante risk sharing (central financing mechanism)

For more see GFSR on: http://www.imf.org/external/pubs/ft/gfsr/2012/01/index.htm

…but policymakers elsewhere have role to play

U.S., Japan — Start Addressing Medium-Term Challenges Now

- Keep sovereign bonds safe: Fiscal consolidation strategies
- Stabilize U.S. housing finance: Household debt and GSEs

Emerging Markets — Do Not Take Stability For Granted

- Preserve policy space and buffers, and be ready to use them
- Macro + prudential + liquidity instruments

Global — The World Needs More and better Collaboration

- *Regulatory reforms*: Complete and implement Basel III/SIFI
- *Supervision*: Enhance and cooperate internationally
- *Macro-prudential*: Develop and implement policy framework

Annex:
backup charts for questions

The choice of how to deleverage reflects risk weighting of assets and home bias

We know some banks' plans, others sell assets or roll-off loans following criteria below

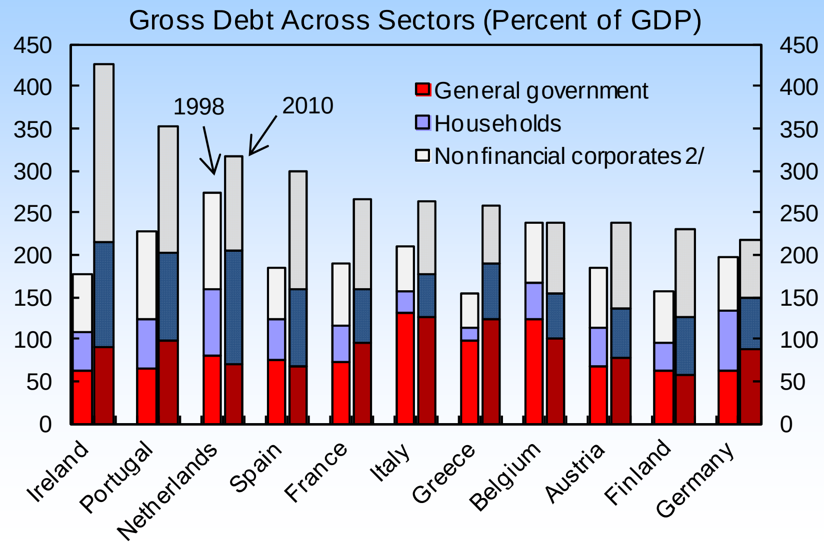
1. Non-govt securities
2. Foreign govt securities
3. Interbank lending
4. Non-core assets

•Choose activities with higher risk weights under Basel 2.5
- Dollar-funded activities
- Non-core activities
- Shed legacy assets

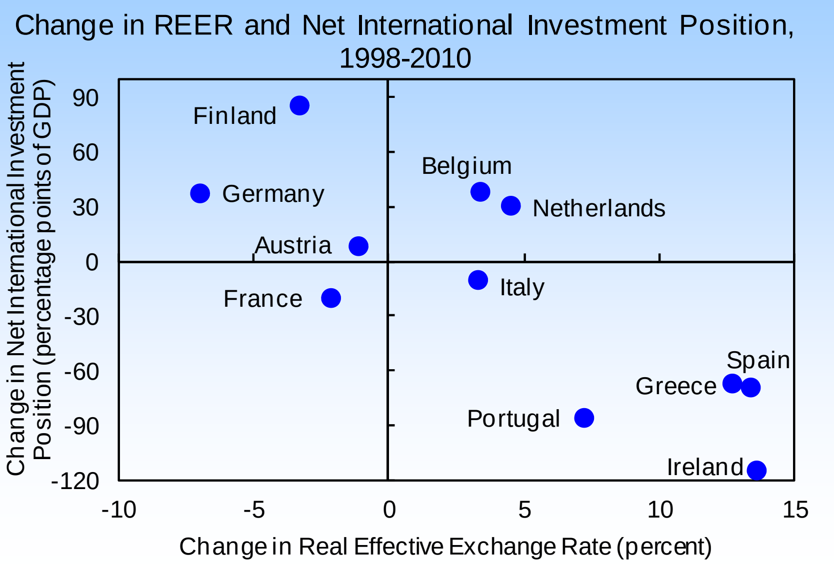
5. Foreign loans
6. Domestic loans

-- Home/regional bias
-- Higher RW loans rolled off before lower RW loans
-- Loans of foreign subsidiaries cannot fall below local deposits

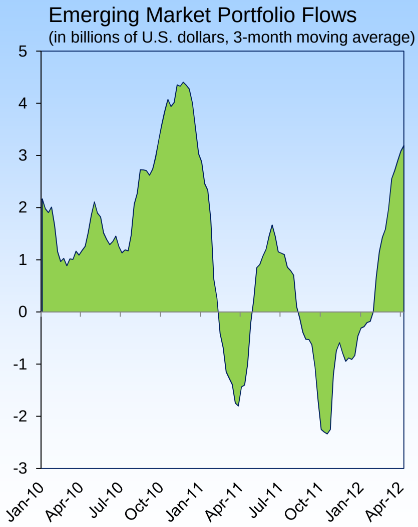
Beyond fiscal strains, many countries are facing a heavy burden of private sector debt…

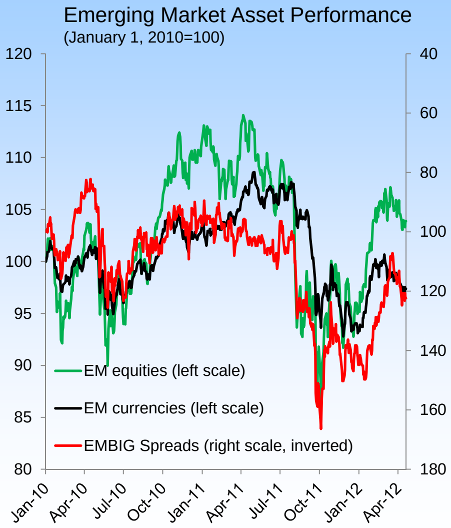


weak competitiveness poses significant adjustment burden



Portfolio flows are more volatile pressuring emerging market currencies and assets





Document: FEWG 32-018 Draft: **FIRST** Source: ABAC Australia Date: 7 May 2012 Meeting: Kuala Lumpur, Malaysia

G20 Update Summary Sheet

Document Title:

Report to ABAC – G20 Updates

Purpose:

For information

Issue:

- The G20 remains committed to supporting growth and job creation, structural reforms, restoring medium-term fiscal sustainability and promoting global rebalancing.

- The G20 Finance Ministers and Central Bank Governors and the IMFC agreed in April to increase the lending resources of the IMF by over $430 billion.

- The G20 will contribute to the comprehensive review of the IMF quota formula by January 2013 and completion of the next general review of quotas by January 2014.

- The G20 Finance Ministers and Central Bank Governors will report to Leaders on their assessment, with input from the International Organisations, of the impacts of excessive commodity price volatility on growth and policy options that countries could consider to mitigate such effects.

- As part of the work of the G20 Energy and Commodity Markets Working Group under the finance track, the OECD, the World Bank and UN will deliver a report to Leaders in June on integrating green growth and sustainable development policies into structural reform agendas.

Background:

ABAC monitors the discussions at G20 to reflect some of the G20 discussions into our report to APEC Leaders as well as Finance Ministers.

Mexico chairs the G20 in 2012. The next G20 Leaders Summit will be held in Los Cabos, Baja California Sur on 18-19 June 2012. Mexico's key priorities for the G20 in 2012 are:

- Economic stabilization and structural reforms as foundations for growth and employment.

• Improving the international financial architecture in an interconnected world. • Strengthening the financial system and fostering financial inclusion to promote economic growth. • Enhancing food security and addressing commodity price volatility. • Promoting sustainable development, green growth and the fight against climate change.
Proposal /Recommendations: None.
Decision Points: Note the report

G20 AGENDA IN 2012

As Mexico chairs the G20 in 2012, representatives of G20 Heads of State and Government convened in Mexico City on 15-16 March 2012. A key focus of the meeting was to review the progress made on the G20's agenda and to continue preparations for the Leaders' Summit to be held in Los Cabos, Baja California Sur on 18-19 June 2012.

Mexico's key priorities for the G20 in 2012 are:

- Economic stabilization and structural reforms as foundations for growth and employment.
- Improving the international financial architecture in an interconnected world.
- Strengthening the financial system and fostering financial inclusion to promote economic growth.
- Enhancing food security and addressing commodity price volatility.
- Promoting sustainable development, green growth and the fight against climate change.

Economic Stability and Structural reform

The priority of the G20 remains to address the key challenges facing the global economy, despite some signs of recovery in the largest advanced economies; there still remain significant risks particularly in light of the modest growth expectations in 2012, financial market pressures and the ongoing weakness in Europe. In the context of these risks, as well as high unemployment and indebtedness in many countries, the G20 remains committed to supporting growth and job creation, structural reforms, restoring medium-term fiscal sustainability and promoting global rebalancing. Complete and timely implementation of the Cannes Action Plan for growth and jobs remains critical, however further work is required. The main priority areas for further policy actions will be reflected in the Los Cabos Action Plan.

Improving the global financial architecture

The G20 remains committed to securing global financial stability. The IMF has an important role to play in meeting the current global challenges. The G20 Finance Ministers and Central Bank Governors and the IMFC agreed in April to increase the lending resources of the IMF by over $430 billion. This significant outcome will enhance the IMF's capacity for crisis prevention and resolution, and will be available to support the entire membership of the IMF.

The G20 supports the efforts to strengthen IMF surveillance and is committed to the full implementation of the 2010 Governance and Quota Reform by the 2012 IMF/World Bank Annual Meeting. The G20 will contribute to the comprehensive review of the IMF quota formula by January 2013 and completion of the next general review of quotas by January 2014.

Stronger and more inclusive financial Systems

The G20 continues to progress its financial regulatory reform agenda, supporting the implementation of agreed reforms to address weaknesses in the financial system such as Basel III, the extension of the G-SIFIs framework, shadow banking, compensation and OTC derivatives. Financial inclusion remains a priority for the G20, working towards enhancing financial education and consumer protection.

A high priority was placed on the identification of issues for the ministerial trade meeting held in April. Key issues identified included trade as a source of growth, a better understanding of global value chains, and financing and facilitating trade. Additionally, G20 countries were encouraged to reverse or avoid any protectionist measures or international trade barriers, as they prevent the recovery of economic growth and development.

Food Security and Commodity Price Volatility

One of the key priorities of the G20 Development Working Group is continuing the G20's work on improving food security for the poor and vulnerable. This will form part of its report to G20 Leaders in June. The G20 Finance Ministers and Central Bank Governors will also report to Leaders on their assessment, with input from the International Organisations, of the impacts of excessive commodity price volatility on growth and policy options that countries could consider to mitigate such effects.

Sustainable Development

On sustainable development, the G20 Development Working Group continues to progress its agreed priorities for 2012 – infrastructure, food security and inclusive green growth. As part of the work of the G20 Energy and Commodity Markets Working Group under the finance track, the OECD, the World Bank and UN will deliver a report to Leaders in June on integrating green growth and sustainable development policies into structural reform agendas. The G20 will also continue to work on climate financing with the establishment of a G20 study group to consider ways to effectively mobilise resources and support the operationalization of the Green Climate Fund taking into account the objectives, provisions and principles of the UNFCCC.

Document: FEWG 32-019 Draft: **FIRST** Source: ABAC Russian Federation Date: 4 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet Template

Document Title:
Report to ABAC FEWG-Financial Stability, Policy Recommendations

Purpose:
For consideration

Issue:
Issues related to financial stability and macroprudential policy focusing on policy recommendations

Background:

ABAC understands the importance of sound financial regulation in maintaining sustainable growth and stable financial systems. ABAC acknowledges that given the high level of connectivity in global financial markets, the impact of financial regulations extends beyond jurisdictional borders. In this regard, there is the risk that new financial regulations being introduced in some jurisdictions may have unintended and unpredictable consequences affecting other markets that could impede the healthy growth of APEC member economies. ABAC has highlighted two issues: first that due account be taken of the cross-border and extra-territorial effects of financial regulations and that the relevant authorities collaborate with each other in addressing those concerns. Second, account is taken of the unintended consequences for market makers across the region and the real economy of new regulations that unduly constrain market liquidity, hinder pricing mechanisms and distort markets.

Proposal /Recommendations:

- ABAC should call on APEC Ministers to affirm commitment to financial stability and macroprudential policies designed to strengthen member economies financial systems and prevent financial systemic risk.
- ABAC should encourage a APEC ministers to undertake a regular global dialogue with regard to the global debate on financial regulatory and supervisory policy and support a global minimum regulatory standard but which allows national authorities in the region flexibility in dealing with particular national circumstances.
- The longer term objective must be to promote sustainable economic growth in the APEC region, stronger financial systems and infrastructure and increase closer coordination and harmonisation in the region through a regional body that unifies financial market regulation and supervision as well as monitoring potentially volatile capital flows

Decision Points:

- Discuss and endorse the recommendations outlined above.

APEC BUSINESS ADVISORY COUNCIL

Prepared for ABAC Finance& Economic Working Group (FEWG)

Kuala Lumpur, Malaysia

21-24 May 2012

FINANCIAL STABILITY: POLICY RECOMMENDATIONS

Andrei Kostin, VTB, President and Chairman of the Management Board

Neil MacKinnon, VTB Capital, Global Macro Strategist

Abstract:

Financial stability is now regarded as an important objective in the aftermath of the 2007-2009 financial crisis. This paper (the second in the series) looks at policies and tools that many APEC economies have pursued since the 1998 Asian crisis in order to achieve financial stability. Macroprudential policy highlights the importance of avoiding and preventing systemic risk and in many respects, APEC economies managed to avoid much of the contagion arising from the crisis in the debt-burdened "advanced" economies.

However, it is important for the APEC economies to ensure that prospective economic growth and development of the APEC financial sector is not damaged by a regulatory and supervisory approach that is more appropriate to the experience of the "advanced" economies. Nevertheless, there is merit in a global minimum standard of regulatory policy that allows APEC economies to build their own regulatory approach while maintaining a dialogue at a global level with other regulatory and supervisory bodies.

Going forward, there is also a strong case at the APEC level of unifying and coordinating regulatory approaches in order to support a macroprudential approach to financial regulation and supervision, promote longer-term economic expansion in the region, the development of financial services and greater financial inclusion as well as supporting liquidity and transparency in APEC financial markets.

Introduction

We presented our first paper on the subject of financial stability to the FEWG in Hong Kong in February this year ("Financial Stability: Dimensions, Background &Key Issues"). The focus of that paper was to outline the importance of financial stability for the economic and regulatory policy agenda. The paper structured the main issues along three principal dimensions (1) private sector leverage (which encompasses the inter-related issues of financial intermediation, corporate and household debt, (2) sovereign debt and long-term sustainability of public finances, (3) global imbalances, monetary policy and stability of fiat currency systems.

The focus of this, our second paper, is to look at policy recommendations with regard to achieving financial stability and, in particular, outlining policy targets and regulatory instruments that are appropriate to the APEC economies and their financial systems. The paper also examines issues related to strengthening financial infrastructure, improving policy co-ordination at the APEC level and looking at issues such as the management of capital inflows which remain an important issue for emerging market policymakers.

The letter sent to interested parties on 30 March from ABAC Chair, Ziyavudin G. Magomedov, and ABAC FEWG Chair, John W.H. Denton, stated that ABAC understands the importance of sound financial regulation in maintaining sustainable growth and stable financial systems and that the issue of excessive speculative movements of capital across financial markets needs to be addressed. ABAC acknowledged that given the high level of connectivity in global financial markets, the impact of financial regulations extends beyond jurisdictional borders. ABAC expressed concern that new financial regulations being introduced in some jurisdictions may have unintended and unpredictable consequences affecting other markets that could impede the healthy growth of APEC member economies. ABAC highlighted two issues. First, that due account be taken of the cross-border and extra-territorial effects of financial regulations and that the relevant authorities collaborate with each other in addressing those concerns. Second, that account be taken of the unintended consequences for market makers across the region and the impact on the real economy of new regulations that unduly constrain market liquidity, hinder pricing mechanisms and distort markets.

Separately, and endorsing these comments, the ABAC FEWG meeting in February highlighted that the experience of the APEC economies in being largely immune from the consequences of the financial crisis during 2007-2009 implied a different regulatory response on the part of APEC and the avoidance of blanket regulatory policies that were more appropriate to the advanced economies. In these circumstances, there is merit for a global minimum regulatory standard overlain with national regulatory frameworks suitable to the needs of the APEC economies.

The structure of this paper is as follows: we highlight the importance of financial stability in the overall setting of monetary policy, outline the key features of microprudential policy and the all-encompassing macroprudential policy and its importance in alleviating systemic risk, we look at the lessons from countries' experiences and in particular, the perspective from the Asian economies which have had long experience in implementing various policy measures designed to control credit growth and leverage especially in the real estate sector (partially driven by capital inflows). The management of capital inflows requires a global perspective and underlines the need for a global dialogue in addressing the direction of regulatory policy.

The Asian economies, in the future, will likely experience substantive growth in their economies with commensurate expansion in the Asian financial sector as well as in the provision of financial services. Our policy recommendations are shaped by the recognition that while the ongoing debate about regulatory policy has a global dimension and thus requires a global dialogue amongst policy makers, a global minimum standard of regulation is preferred thus allowing national authorities to pursue policies more appropriate to their needs and conditions. Nevertheless, the challenge for policymakers is to ensure that the growth in the Asian financial sector is balanced by appropriate levels of regulation and supervision that is properly coordinated within the region.

The Importance of Financial Stability

It is now generally recognised that prior to the financial crisis, policymakers failed to acknowledge increasing systemic risk arising from “cheap money” policies, a build-up of global imbalances, increased leverage, product securitisation and rising asset prices (especially in the real estate sector). Risk was mis-priced, banks’ balance sheets were over-stretched (and largely dependent on wholesale funding) and regulatory oversight was lax or poorly enforced. The build-up of private sector and sovereign debt and its inter-connectedness with the banking sector ended in severe consequences for the economic and financial system that was only stabilised through the introduction of unconventional monetary policies (zero interest rates and quantitative easing) as well as exceptional fiscal support for banks and financial institutions.

Martin Wolf, the Financial Times commentator, has described the financial crisis as creating “bonfire of the verities” by which he means that the crisis exploded widely-held assumptions about the working of the financial system, in particular, the assumption that the financial system would be self-stabilising, that financial innovation would improve risk management, and that low and stable inflation would guarantee economic stability. William Rhodes, formerly of Citibank and a veteran of previous sovereign debt crises, made the point recently that every emerging market sovereign debt crisis was accompanied by a banking crisis. He says that two important lessons from emerging sovereign debt crises are that contagion is always greater than policymakers anticipate and that time is the enemy. In terms of the current debt and banking crisis in the eurozone, he argues that these lessons have been lost on eurozone policymakers who are forging ahead with new regulations and increases in capital requirements ahead of the Basel 3 implementation schedule while ignoring the impact of the eurozone sovereign debt crisis and the soft economic conditions on bank balance sheets. The situation is also not helped by proposals to introduce a new tax within the eurozone on financial transactions. In the US, he also notes that the contribution by the financial sector to growth is less than it should be because of continuous uncertainties (and complexities) in how the Dodd-Frank Act will be implemented.

However, looking at the 2007-2009 financial crisis, it seems that not only were inappropriate macroeconomic policy settings to blame but also an absence of an appropriate focus on financial stability and regulatory policy in hindsight is a key failing. At this juncture, it is worth mentioning that Asian and emerging market economies had responded to the 1997-98 crisis by instituting a variety of both micro and macroprudential policy measures that have since contributed to a high degree of immunity from the most recent crisis of 2007-2009 and more recently from the eurozone crisis (though there have been spill-over effects from the tightening of credit by eurozone banks and the decline in exports to the eurozone arising from the recessionary situation there).

During the 2007-2009 crisis, the complexity and opaqueness of the financial system made it difficult to assess the extent of balance sheet exposures and potential spillover effects in the debt-burdened advanced economies, in particular, the US. The over-leveraged pro-cyclical nature of the financial system and its complex inter-connectedness between public and private sector balance sheets magnified the consequent deleveraging and liquidity risks. Financial intermediation had shifted in large degree to the unregulated “shadow banking” sector where regulatory oversight was less visible. Structural changes in the financial sector in the preceding 10-15 years had seen significant growth in financial institutions that provided bank-like debt products to institutional investors. These financial institutions have been termed shadow banks and the main vulnerability that became evident during the financial crisis was in short-term debt, mostly repurchase agreements (repo) and commercial paper. In that regard, the banking crisis was less a traditional run on banks but rather a run on repo (a repo transaction is a collateralized deposit in a "bank" where the depositor or lender puts money in the bank usually on an overnight basis while the bank promises to pay the overnight repo on the deposited money. To ensure the safety of the deposit, the bank provides collateral that the depositor –large institutional investors, money market funds-take possession of). IMF estimates find that the total outstanding repo in US markets between 2000-2007 was 20-30% of US GDP. Disruptions in US short-term debt markets created a shortage of US dollars in global markets.

In addition, the financial crisis also highlighted an international dimension to the transmission of US monetary policy as globalised banks through their foreign subsidiaries and affiliates reduced lending to emerging market economies and became more unwilling to roll-over existing debt.

In the aftermath of the crisis it is recognised that financial stability is an important objective and that trying to achieve that without hampering sustainable economic growth requires a global co-ordinated response. Policymakers also learnt that systemic risks to the financial system cannot be properly addressed through conventional macro-economic policy responses or through a micro-prudential approach that treats problems facing financial institutions on an individual (rather than system-wide) basis.

Macroprudential policy can be defined as an orientation of regulatory and supervisory arrangements from a system-wide perspective or top-down approach (Borio C, 2011). Its objective is to limit the risk of episodes of system-wide financial distress and to avoid the costs they generate for the real economy. The focus is on the financial system as a whole as opposed to individual components and uses prudential tools calibrated to target the sources of systemic risk. Macroprudential policy interacts closely with other spheres of public policy. For example, the stance of monetary policy can affect risk-taking incentives while fiscal policy and sovereign debt levels can be an important source of vulnerability for the financial sector. In turn, macro-prudential policy interventions can have macro-economic effects. For example, raising capital requirements in a credit boom can dampen aggregate demand and perhaps increase unemployment. Given these inter-linkages, effective macroprudential frameworks require institutional arrangements and governance structures tailored to national circumstances.

However, macroprudential policy should not be regarded as a substitute either for micro-prudential policy which aims to underpin the solidity of individual institutions and /or controls on consumer credit or indeed as a substitute for traditional macro-economic policy aimed at price stability, fiscal sustainability or full employment. Of course, macroprudential, microprudential and macroeconomic policies are not mutually exclusive and the pursuit of financial stability should be a shared (and co-ordinated) policy objective. Macroprudential policy of itself is not a "magic cure all" especially in resolving global imbalances. Pre-emptive policy action needs mechanisms for the early identification and assessment of systemic risks though it is recognised that stronger analytical tools are required to identify and measure systemic risk in a forward-looking way. Academic research identifies accelerations in debt and economy-wide leverage as key antecedents to banking crises and that changes in (accelerating) credit supply are a strong predictor of financial crises (where in the recent financial crisis, the credit boom took the form of an increase in the issuance of asset-backed securities particularly mortgage-backed securities. By 2006, private label securitisation grew to $2 trillion from $500 billion in 2000).

Microprudential policy measures emphasise the need for solidity of financial institutions and can also include restrictions on lending to individual borrowers as a way of trying to modify spending behaviour. Essentially, the main focus in practise is to encourage banks to hold more capital, increase liquidity buffers so as to withstand the possible drying-up of money market funding, and controls on bank leverage. Typically, banks can suffer structural fragility in that long assets are funded by short liquid liabilities which increases the risk of "runs" or "panics" thus requiring a "safety net" for depositors though a "safety net" can increase moral hazard and lead to excessive risk-taking on the part of banks. Thus, risk-focused supervision is central to a microprudential perspective especially in terms of risk management and ability of the bank to absorb external shocks in terms of its capital, asset quality, earnings and liquidity.

Regulatory reform since the financial crisis

The changes in the structure of the financial system in the period prior to the crisis which saw the progressive integration of traditional lending and capital markets activities and the diminishing importance of deposits as a source of funding in favour of capital market instruments fostered the emergence of large financial conglomerates. The prevailing regulatory framework struggled to take account of these changes in the financial system. If anything, the emphasis was on financial deregulation and liberalisation and a "regulation-lite" approach by regulatory authorities and central banks.

There were two major regulatory challenges revealed by the crisis. First was the problem of too-big-to-fail (TBTF) financial firms and second was the problem of credit intermediation partly or wholly outside the limits of the traditional banking system (the "shadow" banking system).

The post-crisis regulatory reform program has mainly been directed at the TBTF problem with a view to enhancing the resilience of the largest financial firms. The Dodd-Frank Act established the Financial Stability Oversight Council (FSOC) which has the authority to bring within the perimeter of prudential regulation any non-bank financial firm whose failure might be the source of systemic problems.

In addition, shortcomings in pre-crisis capital requirements for banking firms are being addressed through several complementary initiatives. These have all been reflected in the Basel 3 recommendations which requires globally active banks to hold more higher quality capital and larger liquidity buffers with a provision to impose capital surcharges based on firms' global systemic importance. Risk-weightings have been raised for traded assets which improves the quality of loss-absorbing capital through a new minimum common equity ratio standard and introducing an international leverage ratio requirement. More recently, Daniel Tarullo, the leading Federal Reserve official for financial regulation, has called for some flexibility in the liquidity coverage ratio which might have the unintended effect of exacerbating a period of stress by forcing liquidity hoarding and which might become a straitjacket for weak banks.

A third reform is aimed at the unusual systemic importance of certain institutions. The Basel Committee has released a framework for calibrating capital surcharges for banks of global systemic importance and which is consistent with section 165 of the Dodd-Frank Act (which imposes more stringent capital standards on systemically important firms to be phased in beginning 2016). More recently, some US investment banks are questioning the proposal that restricts the amount of exposure banks can have to a single counterparty to 25% of their regulatory capital and which the Federal Reserve wants to add a 10%

limit on the amount of exposure that financial groups with more than $500 billion in assets can have to each other.

A fourth reform, intended to ensure that no firm is too big to fail, is the creation under the auspices of the Dodd-Frank Act of an orderly liquidation authority. Herelosses can be imposed on a failed institution's shareholders and creditors while avoiding runs by short-term counterparties and preserving where feasible the operations of sound, functioning parts of the firm. This avoids the stark choice of a bailout or disorderly bankruptcy that faced the authorities in the 2008 crisis. This does raise a number of cross-border issues such as the effect on certain contractual obligations of a firm in a host country when the home country places that firm into resolution (the original rationale of Basel's tired capital requirements was that Tier 1 capital would be available to absorb losses so as to allow the firm to continue as a going concern while additional Tier 2 capital would be available to absorb losses if the firm failed).

A fifth reform relates to quantitative liquidity requirements. The Basel Committee produced two proposals, the Liquidity Coverage Ratio (LCR) with a30 day timeframe and the Net Stable Funding Ratio (NSFR) with a one year timeframe though both proposals are subject to further examination and potential revision (Tarullo D, 2012).

To date there is a well-defined set of regulatory measures to address the TBTF issue. However, as Tarullo points out the same cannot be said for the second major challenge revealed by the financial crisis which is the instability of the shadow banking system. There is the risk that increased regulation of the major securities firms might encourage the migration of parts of the shadow banking system into unregulated areas. Dodd-Frank, it has to be admitted, does address issues of derivatives trading such as central clearing of standardized derivatives and margining of non-cleared trades in OTC markets. Nevertheless, at this stage, there is not a properly formulated set of proposals to deal with regulation of the shadow banking system though the debate continues especially with regard to reforms involving money market funds and the tri-party repo market (especially the large amount of intraday credit extended by clearing banks on a daily basis).

In conclusion, there still remains plenty to be done in terms of further progress in implementing existing proposals and addressing other key issues (such as shadow banking, mortgage financing) in the process of regulatory reform. Finally, as Tarullo notes, finance and financial intermediation are not ends in themselves but are instead means for pursuing savings, investment and consumption goals which implies an affirmative view of what we want financial institutions to do.

TABLE 1. Basel timeline

1988	Basel 1 minimum capital standards established (tier 1 risk-based capital, total risk-based capital, and tier 1 leverage ratios)
1996	capital requirement for market risk (Market Risk Amendment) added to Basel 1
April 2008	Basel 2 advanced approaches become effective in the US (includes specific requirements for operational , credit and market risks).
July 2009	Basel 2.5 finalised re market risk and book securitisation frameworks
December 2010	US agencies release notice of proposed rule-making for Basel market Risk rules. The Basel Committee on Banking Supervision (BCBS) finalises package aimed at increasing the capacity of banks to absorb losses relative to risk, constrain leverage through a credible non-risk based backstop, absorb shocks to funding and constraining structural funding mismatches. New minimum common equity standard of 4.5% of risk-weighted assets (RWA), capital conservation buffer of 2.5%, countercyclical buffer of 2.5% and increase in SIFI surcharge to 2.5%.
November 2011	guidance on SIFI surcharges finalised
During 2012	Basel 3 defines capital, counterparty and leverage rules
January 2013	expected transition to Basel 3 final rules with full implementation by January 2019. Minimum capital ratios to be phased in between January 2013 and January 2015 and a conservation buffer and SIFI surcharge (from 1-2.5%) to be phased in from January 2016 to December 2018.

The global regulatory architecture

Now, mainly through the auspices of the G-20 and IMF, there are improvements taking place in the global regulatory architecture that is designed to promote financial reform and improvements in regulatory policy. The aim must be to secure a more stable global financial system without losing innovation and dynamism which helps secure sustainable economic growth and financial stability.

The process of financial and regulatory reform should at least have the following characteristics. The first of these is the need for global co-ordination in terms of “micro-prudential” regulation that is designed to improve the resilience of individual financial institutions. This needs to take into consideration issues of “moral hazard” where government support for “too big to fail” financial institutions can diminish the incentives to modify banking sector behaviour and thus saddles the taxpayer with a large fiscal burden.

The second characteristic requires that regulatory supervision be effective in terms of compliance with rules related to corporate governance and risk management. The third characteristic is the approach taken by the IMF for coherent resolution mechanisms at the national and cross border level given the global reach of many financial institutions. This is particularly relevant for APEC economies.

Macro-prudential policy-objectives

Macro-prudential policy is designed to achieve financial stability (or at least minimise the impact of crises if it is the case that financial capitalism is inherently prone to financial crises or so-called "Minsky Moments").

Macroprudential policy guards against the risk of a systemic event which can create negative externalities such as contagion, counterparty risk and fire-sale effects on financial markets. Defining financial stability is imprecise. Measuring systemic risk is also imprecise. Unlike monetary policy which typically has a specified objective of price stability defined quantitatively as a specific target or fiscal policy which has an objective defined in terms of debt sustainability with quantitative targets for budget balances and/or debt/GDP ratios, it has so far proven difficult to specify the objective of financial stability in such terms.

Macroprudential measures can be categorised into three primary groups. First are price and quantity based measures designed to limit credit expansion e.g reserve requirement, credit ceilings. Second, regulations aimed at maintaining the quality of loans e.g LTV ratios, DTI ratios). Third, strengthening the resilience of national banking systems to balance sheet shocks e.g capital adequacy ratios, stress tests.

TABLE 2: Microprudential v Macroprudential Approaches

	Microprudential	**Macroprudential**
Ultimate objectives	Protect investors/depositors	Avoid GDP loss
Proximate objectives	Soundness of specific SIFI's	Stable provision of financial services, countercyclical pressures for credit and asset prices
View of macroeconomy	exogenous	endogenous
Direction of effects	Protect the banks from the cycle	Protect the cycle from the banks
Time horizon	Forward-looking	Forward-looking
Analysis	Firm specific peer comparison	Aggregates, correlations and linkages
Disclosure	**Active tool to change behavior and affect outcomes**	**Supervisory information disclosure**

Source: Federal Reserve Bank of New York.

The Committee on the Global Financial System (CGFS, 2010) further classified macroprudential instruments by types of vulnerability in the financial system. To manage leverage includes capital ratios, risk weights, provisioning and credit growth. As regards liquidity risk then measures such as liquidity ratios, fx lending restrictions and currency mismatch limits are relevant while the issue of inter-connectedness brings into focus concentration limits, capital surcharges and more focused regulation and supervision of banks' subsidiaries.

Nevertheless, the national macro-prudential authority must have a clear and unambiguous objective, be seen to be politically independent and immune from "regulatory capture" from financial industry lobbyists, and have a medium to long-term policy horizon (as the benefits of financial stability will typically only be seen in the longer-term though the costs of imposing measures designed to produce stability such as capital buffers can have undesired short-term effects such as raising the cost of credit and/or forcing credit restricting deleveraging of a banks' balance sheet).

Macro-prudential policy must have at least the objective of preventing systemic risk or at least reduce the systemic wide consequences of a financial or economic shock that creates correlated funding and liquidity pressures which can undermine the integrity of the financial system. This aspect of macro-prudential policy is concerned with managing the distribution of risk within the system and monitoring the concentration of risk.

The report highlights that while work in this area is still developing, important steps have been taken on new policy instruments and in designing governance frameworks to support macro-prudential policies. Systemically Important Financial Institutions (SIFI's) are also being identified as part of the risk process in order to monitor liquidity and solvency. The "Volcker Rule", complicated though it has become, looks to separate proprietary trading activities from bank's retail operations. As regards the issue of pro-cyclicality, the discussion involves the use of counter-cyclical capital charges and "through-the-cycle" provisioning. There is also an attempt by regulators to align bankers' compensation more closely with longer-term risk-adjusted returns.

In Asia, macroprudential policy measures are not a new phenomena especially measures designed to manage loan and credit extensions to the property market and monitoring pro-cyclical movements in debt, leverage and capital flows. The table below highlights some of the various measures that have been implemented in some countries in recent years.

TABLE 3: Selected Prudential Measures for Credit Booms in Asia

Country	LTV	Capital	Provision	Exposure	Lending
China	2001,2005, 2006				2004
Hong Kong	1991, 1997			1994-98	
Korea	2003, 2006-08				2006
Malaysia	1995-98	2005, 2008-09		1997-98	1995-97
Singapore	2010			2010	—

Source: Siregar, Asian Development Bank Institute, November 2011.

Organisational structure

In terms of organisational structure of the body designed to oversee and implement macro-prudential policy, the IMF and BIS possess the attributes to set the parameters of the debate through existing resources and frameworks and these agencies have taken the lead in setting the global debate on financial stability, regulatory reform and the shape of micro and macro-prudential policies. On top of that, individual countries have taken approaches best suited to their economic and financial policy structure rather than adopt a "one size fits all" approach.

In the US, for example, the Financial Stability Oversight Council (FSOC) set up by the Dodd-Franks Act in July 2010 is chaired by the US Treasury Secretary and brings together the Federal Reserve, federal financial regulators, an insurance expert and state regulators. The FSOC is charged with identifying threats to financial stability, promoting market discipline, and responding to emerging risks to the stability of the US financial system. The FSOC reports to Congress annually. The FSOC can recommend breaking up firms that pose a "grave threat" to financial stability and recommend that Congress close specific regulatory gaps.

In the UK, the Bank of England takes responsibility for financial stability and has set up a Financial Policy Committee (FPC) that held its first meeting in June 2011. The FPC is accountable to the governing body of the Bank of England (BoE). The FPC is charged with contributing towards the BoE's financial stability objective by identifying, monitoring, and taking action to remove or reduce systemic risks. Its focus is to encompass structural aspects of the financial system and the distribution of risk within it as well as cyclical threats from unsustainable levels of leverage, debt or credit growth. In monitoring financial stability, the FPC will identify emerging risks and vulnerabilities and cyclical imbalances using a broad range of indicators. The FPC has two main powers. The first is a power to make "comply or explain" recommendations to the new micro-prudential authorities in the UK, the Prudential Regulation authority and the Financial Conduct Authority. The second is a power to direct the microprudential authorities to adjust specific macro-prudential tolls that HM Treasury will set out in secondary legislation. The FPC has categorised macro-prudential instruments into three types:

- Those that affect the balance sheets of financial institutions
- Those that affect the terms and conditions of loans and other financial transactions
- Those that influence market structures.

The first two categories relate mainly to time-varying risks so the corresponding tools will be time-varying in nature while the third category covers tools related towards cross-sectional risk. Balance sheet tools include maximum leverage ratios, countercyclical capital and liquidity buffers, time-varying provisioning practices and distribution restrictions. These tools influence the aggregate level of leverage and maturity mismatch in the financial system. Tools that affect the terms and conditions of financial transactions include the ability to restrict the quantity of, or the capital requirements on, lending at high loan-to-value . This category includes the power to impose minimum margining requirements on secured financing and derivative transactions within the financial system and with end-users.

Instruments and Indicators

A wide range of indicators and models have been used to assess systemic risk in terms of both its time and cross-sectional dimensions. These indicators should be able to signal the gradual build-up of imbalances and vulnerabilities as well as rising concentrations of risk. Shularick and Taylor (2010) in their analysis of financial crises find that a build-up in credit as a % of GDP is a reliable indicator of financial booms and busts and that credit growth is the best indicator of financial stability.

However, the main measurement approaches can be categorised as follows:

- Aggregate indicators of imbalances: typically here this involves macro-economic data or balance sheet indicators such as bank credit, liquidity and maturity mismatch, currency risk and sectoral or external imbalances. Measures of leverage in the financial, household and corporate sectors. The gap between the credit-to-GDP ratio and its long-term trend is regarded as an indicator of systemic risk in the banking system and hence as a guide to set the counter-cyclical buffer for banks
- Indicators of market conditions: these are typical stress indicators relating to bank funding pressures (such as the 3 month euro currency basis swap) and measures of counterparty risk in the interbank market such as libor/euribor-OIS spreads while in the equity market, the VIX indicator is regarded as a measure of volatility. In the bond markets, yield spreads in sovereign debt are also regarded as indicators of funding pressures or fiscal vulnerability. These are high-frequency indicators and widely available to market participants on a daily or intra-day basis

In many so-called emerging market economies, regulators have addressed risks in real estate markets by putting limits on loan-to-value ratios, caps on loan to income ratios and caps on debt to income ratios. Some economies have used direct monetary policy instruments to constrain credit supply during booms including limits on the level or growth rate of aggregate credit or changes in reserve requirements. China and Hong Kong have used a variety of fiscal measures such as stamp duty on property holdings or administrative limits on the volume of bank lending or restraints on local government exposure to real estate.

The implementation of these instruments has been on a discretionary ad hoc basis rather than on any rules-based approach. As Zhu (2012) points out emerging market economies produce close to half of global output but hold only 19% of global financial wealth. Compared with advanced economies, emerging markets have significantly stronger growth rates, lower unemployment rates, lower debt and stronger fiscal and monetary buffers. However, capital flows are volatile and are expected to remain so in the medium term.

For APEC economies, the management of cross-border capital flows remains an important macro-economic policy challenge especially in pursuit of financial stability. Spill-over effects from monetary policies implemented in the US (quantitative easing which has weakened the US dollar, for example) also have effects on emerging market currencies and the conduct of monetary policy.

TABLE 4: Examples of possible macroprudential instruments

Rules governing	Measures
Bank loans	Caps on loan-to-value mortgages
	Caps on the ratio of debt service to household income
	Rules on the reference interest rate for mortgage lending
	Rules on currency mismatches
Banks balance sheets	Countercyclical capital ratios applying to capital
	Adjustment to risk weights
	Rules on loan-loss provisioning
	Caps on loan-loss provisioning
	Caps on loan-to-deposit ratios, core funding ratio
	Bank reserves deposited with the central bank

Source: Moreno, BIS Working Paper no 336, January 2011

Balance sheet tools-description

The most commonly used instruments to address macro-prudential risk include the following:

- Tools to address risks arising from excessive credit expansion and asset price booms especially in real estate markets and would include dynamic capital buffers, dynamic provisions, loan-to-value (LTV) and debt service-to-income ratios as well as terms and conditions of transactions in wholesale financial markets
- Tools to address amplification mechanisms of systemic risk linked to leverage and maturity mismatches such as risk weights or limits on intra-financial system exposures
- Tools to mitigate structural vulnerabilities and limit systemic spillovers. Disclosure requirements that target common exposures, common risk factors and interconnectedness

The Basel 3 framework puts in place three elements to address procyclicality: a maximum leverage ratio, a capital conservation buffer and a countercyclical capital buffer. It is also worth making a distinction between a fixed and variable approach in which the former focuses on gross leverage ratios and core funding ratios that are not adjusted during the course of the economic cycle in order to bolster the system's resilience and the latter where tools are varied in response to business cycle developments.

The range of macroprudential tools also encompasses the following categories:

- Measures imposed on particular credit markets e.g direct lending controls, loan growth targets, LTV and DTI caps
- Measures to address capital flow volatility e.g fx reserve management
- Balance sheet measures e.g leverage ratio, SIFI capital surcharge, interbank concentration limits, liquidity ratios
- Limit risk and increase buffers e.g capital charges, provisioning policies, loan-to-deposit/core funding requirements, fx mismatch limits
- Communications e.g financial stability reviews, macro stress tests, supervisory guidance, horizontal reviews
- Inputs to macroprudential assessments e.g bank lending surveys, credit risk surveys, mortgage lending survey, credit information

Discretionary approach

The fluidity of a dynamic financial system especially in the evolving EM economies suggests that a discretionary approach rather a rules –based approach would probably be more effective. Financial institutions find their way round "rules" and in financial systems which are evolving and developing, complex changes in the demand for money and credit can take place which might make a rules-based approach inoperable and redundant.

The changing nature of financial systems requires the regulators and policymakers to monitor a wide range of indicators that are considered to be fundamental drivers of financial and credit cycles as well as drivers related to cross-border portfolio flows and potential "stress" indicators related of levels of fx reserves and ability to service short-term debt. The history of sovereign debt, banking and currency crises has been very well documented over the years and the key financial and economic indicators that provide an "early warning" system of potential trouble are well known too (for example, the IMF's "Financial Soundness Indicators" and the IMF's quarterly Global Financial Stability Report).

Whether national central banks should be involved in the organisation structures of bodies charged with oversight of macro-prudential policy is debateable as it then leaves central banks open to a charge of conflict of interest. For example, in the run-up to the financial crisis, it has been alleged that the Federal Reserve adopted a "super easy" monetary policy that indirectly encouraged excess risk taking.

If macro-prudential policy required interest rates to go up in order to reduce the amplitude of the credit cycle, would the Federal Reserve have complied? There is also a strong case for international co-operation in setting macro-prudential policy in order to avoid regulatory arbitrage. This argues in favour of a global minimum regulatory standard that has agreement from national macro-prudential overseers, the central banks, and national regulatory authorities.

Lessons from Country Experiences

IMF research (Lim.C, October 2011) using data from a group of 49 countries suggest that the following instruments help dampen pro-cyclicality: caps on the loan-to-value ratio, caps on debt-to-income ratio, ceilings on credit or credit growth, reserve requirements, countercyclical capital requirements and time-varying /dynamic provisioning. The effectiveness of the instruments does not appear to depend on the exchange rate regime nor the size of the financial sector. The instruments have been used to mitigate four categories of systemic risk:

- Risks generated by strong credit growth and credit-driven asset price inflation
- Risks arising from excessive leverage and the consequent deleveraging (leverage is the amount of debt borrowed to acquire assets. The IMF consider the amount of leverage more than one standard deviation from its historical trend to be excessive.
- Systemic liquidity risk which arises when the financial system has an aggregate shortage of liquidity and financial institutions are not able to obtain short term funding
- Risks related to large and volatile capital flows including foreign currency lending

Interestingly, emerging market economies have used macro-prudential policies more extensively than advanced economies according to the IMF. This may reflect less developed financial markets and the greater domination of banks of relatively small financial sectors. In addition, the exchange rate regime plays a role and in emerging markets, crawling or fixed pegs limits the room for interest rate policy.

In these circumstances, credit growth tends to be associated with capital inflows as the implicit guarantee of the fixed exchange rate provides an incentive for financial institutions to expand credit through external funding. Credit-related measures (LTV caps and ceilings on credit growth) are often used by these countries to manage credit growth when the use of interest rates is constrained. IMF research finds that macroprudential instruments have typically been successful in reducing the correlation between credit and GDP growth as well as reducing pro-cyclicality in the financial system. Emerging market economies are more concerned about systemic liquidity risk and tend to use liquidity –related measures more often.

TABLE 5: Examples of discretionary interventions:

Hong Kong	LTV ratios varying by value of property, use of supervisory letters encouraging prudence in residential property lending; advice to limit to industry average the ratio of property related lending to total loans for use in Hong Kong: advice to limit growth rate of residential mortgages to nominal GDP growth rate. Loan caps on mortgages introduced (August 2010)
Malaysia	LTV limits; limits on loan growth in property sector. Reserve requirements increased. Malaysia experienced real estate booms in 1995-96, 2004-5 and 2010 (introduction of 70% LTV for a third house loan in 2010).
South Korea	LTV limits and limits on ratio of debt service to income (DTI) applied to specific property lending markets defined regionally and with variation depending on maturity and collateral value. In June 2010, Korea introduced ceilings on banks' foreign derivatives positions to reduce the short-term external debt that resulted from banks' provision of forward contracts to corporate. The ceilings were expressed as a ratio to bank capital and set at 50% for resident banks and 250% for foreign banks' branches
Singapore	Real estate cycles have been strong especially in the 2004-08 period with a 45% increase in real house prices and then subsequent sharp decline 2008-09. LTV caps were lowered for all borrowers as well as lending ceiling on banks' loan exposures to the property sector.
Thailand	Rapid credit growth, significant house price increases and massive capital inflows in the first half of the 2000's followed by subsequent decline in house prices. LTV caps introduced as well as DTI caps. Also imposition of higher risk weights for high value mortgages
China	a domestic credit boom in 2009 and 2010 where credit growth was driven in part by lending to local government financing platforms (LGPF's) which were vehicles set up to make infrastructure investment. LTV caps were lowered from 80% to 70% for primary homes and to 505 for second homes (April 2010), mortgages for third homes were suspended (September 2010), the LTV cap on second home mortgages was lowered to 40% (January 2011). Monetary policy was tightened through higher interest rates and increases in RRR.
India	Risk weights and provisioning requirements for housing and commercial real estate, differentiated by size and LTV ratios; requirement for board-level policy on real estate exposure covering exposure limits, collateral and margin 80% LTV for residential real estate (2010). Increase in risk weights on housing loans from 50% to 75%. Reserve requirements increased.
Indonesia	increased reserve requirements for local currency deposits and for foreign currency deposits, designed to curb inflows from advanced economies and to curb inflationary pressures.

Sources: BIS, 80th Annual Report, June 2010 and "Enhancing Financial Stability and Resilience", Group of 30, October 2010, IMF Working Paper WP/11/238, October 2011.

The Asian Perspective

In the run up to the 1997-98 Asian financial crisis, the boom in real estate markets in many emerging economies in Asia, which was fuelled in part by capital inflows, resulted in increased financial imbalances that were manifested in soaring asset prices, a large increase in leverage in financial institutions and corporations, and deterioration in the currency and maturity mismatches in the balance sheets of banks and other nonbank financial institutions.

- In the aftermath of the 1997-98 crisis, Asian economies made concerted efforts to improve the stability and efficiency of their financial systems. Risk management was strengthened, corporate governance improved and equity capital increased over and above BIS capital adequacy requirements. In terms of macroeconomic policy, fx reserves increased and provided a cushion against future shocks (there are side-effects related to fx reserve accumulation that have consequences for cross border capital flows and the resolution of global imbalances).

Asian financial systems were generally unaffected by the 2007-2008 financial crisis reflecting sound balance sheets, prudent risk management and modest exposure to toxic assets. Asian regulatory frameworks were more "conservative" with less regulatory capture and regulators already had in place macroprudential policies (LTV's etc). Asian banking sector fundamentals in terms of capital adequacy ratios remained strong through the crisis and bank NPL ratios were stable. Asian financial systems are still relatively bank-dominant and have large retail deposit bases though systems remain vulnerable to volatile capital flows and "double mismatches".

For economies in the region, financial systemic risk tends to arise from the following areas:

- The pro-cyclicality of the economic cycle
- The interconnectedness of markets and institutions
- External shocks that cause sudden capital reversals and consequent adverse volatility. In addition, there are spill-overs from monetary policy settings in the major economies e.g the Fed's policy of quantitative easing which weakens the US dollar

However, some Asian economies were affected by the global economic and financial crisis of 2008-2009 and there was little evidence of so-called "decoupling" with the advanced economies given trade links as well as the impact of the retreat of portfolio flows away from Asian and emerging market economies during periods of investor risk aversion. The eurozone debt and banking crisis of the last two years has culminated in a credit squeeze which has impacted Asian banks (and economies) as eurozone banks cut credit lines as they delivered their balance sheets and faced funding pressures in the interbank market.

The two major sources of instability that have affected Asian economies is the boom-bust cycle in the real estate market and balance sheet mismatches of currency and maturity at banks and other financial institutions. In the past few years, for example, China and Hong Kong have witnessed "bubble" type behaviour in house prices which has prompted the authorities to tighten monetary policy and impose other measures designed to cool lending and speculative activity in the housing markets.

Some Asian central banks have already incorporated financial stability into their policy objectives. Since the 1997 crisis, Asian authorities have enforced macro and micro prudential regulations to supplement monetary policy measures and closely monitor pro-cyclical movements in debt and leverage.

The institutional framework for macroprudential management is important and some commentators have advocated the creation of a systemic risk council or systemic stability regulator that is independent of the central banks. There is certainly a strong case for unifying the various policy forums and councils within the region as a way of better coordinating a regional approach to macroprudential policy and financial stability.

Strengthening Financial Infrastructure

By 2030, many Asian economies are expected to achieve developed economy status with the financial sector set to expand in tandem with the rise in GDP per head, rising financial wealth and increased economic expansion and modernisation. Safeguarding and promoting financial stability will become increasingly important. The latest BIS report "Principles for Financial Market Infrastructures", April 2012, provides the latest recommendations for policymakers in terms of infrastructure requirements. The growth of regional financial centres will continue to evolve and centres like Hong Kong and Singapore already manage to score top positions in terms of competitiveness and development scores just outside of London and New York. The BIS report contains new international standards for financial market infrastructures (FMI's) including systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade depositories. The new standards are designed to make FMI's more resilient to financial crises and participant defaults. The BIS report also includes revised responsibilities of the relevant authorities in regulating, supervising and overseeing FMI's. The standards set out a specific minimum requirement to ensure a common minimum level of risk management across FMI's and countries and cover nine broad categories which are general organisation, credit and liquidity risk management, settlement, CSD's and exchange-of-value settlement systems, default management, general business and operational risk management, access, efficiency, and transparency.

TABLE 6: Development of Financial Assets, $bn

	2010	**2030**	**Share of world total, % 2010**	**2030**
Bank deposits	13390	53768	23.7	44.1
Private bank credit	8278	32998	16.7	32.9
Stock market cap	10686	42442	19.4	34.4
Private bond market cap	**2162**	**17203**	**4.1**	**13.7**

Source*:* Morgan and Lamberte, ADBI Working Paper, February 2012 Note: data refers to ASEAN, PRC and India

Looking ahead the region will require

- An integrated market, harmonisation of regulation and taxation, regional monitoring and surveillance, Asian Financial Stability Dialogue
- Deeper and more liquid markets, improving financial infrastructure, development of regional financial centres, expansion of access to financial services
- Effective policy frameworks and financial inclusion, mobilising regional savings, regional financial safety net, from CMIM to Asian Monetary Fund
- Development of regional financial centres
- Regional forums and dialogues and representation at global level
- Management of volatile capital flows

Recurrent capital inflows pose important challenges for policymakers in emerging market economies and constitute three types of risk such as spill-over/contagion risk, domestic credit risks and domestic financial contagion.

International consistency in macro-prudential policy

The integrated nature of the global economy and global financial markets requires international co-operation amongst the bodies charged with oversight of macro-prudential policy. The G-20 Mutual Assessment Process, the IMF in conjunction with the Financial Stability Board are all involved in regular discussions in this area as well as identifying and monitoring common exposures, risk concentrations and financial imbalances. Much of the debate on financial regulation reflects the viewpoints and problems of the US and eurozone and are therefore not necessarily relevant for emerging economies. Asia needs to deepen and integrate financial market, harmonize capital market regulations and liberalize cross-border flows. This would encourage recycling of Asian savings for Asian investment. Initiatives to strengthen local currency bond market development needs to be strengthened.

Impact on the Shape of The Financial System

Regulatory reform of the banking sector and supervision of the financial system is likely to dominate the international agenda for some time. The after-effects of the financial and economic crisis are proving to be long-lasting and the real costs of the crisis in terms of lost output and employment have proved severe. More supervision and regulation will likely se banks returning to its traditional retail function while the nonbanking sector will likely expand its role as a supplier of credit.

This means that regulators face what is called a “boundary problem” in that the regulatory perimeter will continually expand as the scope of institutions falling under the regulatory umbrella continues to expand (Vinals J.2010). Market infrastructure will become more transparent as OTC derivatives are funnelled into central clearing facilities which should allow easier monitoring of trades and pricing thus helping to reduce problems related to counterparty risk. In comparison to recent years this might produce a financial system that displays less leverage and less risk though the shrinkage of the banking sector’s balance sheet might result in a financial sector that contributes less to national output and employment.

There is a strong case for improving the Asian regional approach to financial stability perhaps building on the Chiang Mai initiative and move towards the setting up of an Asian Monetary Fund (especially given the European-bias of existing IMF lending facilities). APEC finance ministers have, and continue to be focused on initiatives regarding financial stability and macroprudential policy.

The IMF's Financial Surveillance Work Agenda

Finally, it is worth noting what the IMF's latest position is as regards its agenda in promoting policies in pursuit of financial stability and effective operation of the international monetary situation as this shapes the nature of the policy response from APEC leaders in engaging with a policy dialogue. The IMF's current agenda has three dimensions:

- Containing the impact and spill-overs of the current crisis
- Enhancing systemic risk monitoring
- Building more resilient financial systems to support growth

As far as emerging and developing economies are concerned, the IMF is actively engaged in assessing the financial vulnerabilities arising from volatile capital flows and assessing appropriate macroprudential and capital flow management measures. Work in progress centres on monitoring more effectively systemic risk, building more resilient and growth-enhancing financial systems and strengthen their ability to prevent and manage crises. The IMF are looking to engage in an active dialogue in developing a macrofinancial approach to global surveillance. There is an opportunity as a "global stakeholder" for APEC/ABAC to increase their involvement here especially with regards trade and financial interconnectedness, policy implications of cross-border banking, fiscal-financial linkages and macropolicy spill-overs which may be relevant to emerging market economies.

Conclusions

This paper has attempted to outline the purpose and objectives of macro-prudential policy in contributing towards financial stability. It is recognised that such a policy is complementary to macro-economic policies and that are designed to produce price stability and fiscal unsustainability. The paper has also outlined the main tools and instruments for use in responding to the cyclical and cross-dimensional aspects of systemic risks. The ultimate objective is to strengthen the resilience of the financial system to adverse shocks and limit the spill-overs into the real economy. The regulatory and supervisory framework will continue to evolve as financial markets and financial institutions evolve.

By 2030, many emerging market economies (Asia, China, India) are expected to achieve developed economy status which will imply an important contribution from the financial sector in terms of facilitating economic growth, financing investment and infrastructure projects and mobilising the region's high savings and promoting the transparency, deepening and liquidity of capital markets and money markets and coordinating regional financial institutions with the global financial and monetary system. As an aside, the growing contribution of emerging market economies (and APEC, in particular) to global economic growth increases the need for regional policymakers to increase their voice at global level and ensure a unified dialogue with regard to responsible global governance and regulatory policy.

Financial stability needs to be strengthened but without stifling innovation and growth. A regional financial infrastructure needs to be developed in order to support longer-term economic growth in the region (for example, improving the financing of SME's which account for 90% of all businesses in APEC).

Macroprudential policy is generally at an early stage of implementation and to make the policy effective requires the building of a sound institutional framework (reflecting country-specific circumstances), designing an analytical framework to monitor and assess systemic risk (recognising that systemic risk has more than one dimension) and establishing international cooperation (as credit booms and asset bubbles can be fed by external developments).Steps must be taken to enhance financial stability, upgrading supervision frameworks and improving regulatory capacity. Management of potentially volatile capital and portfolio flows should be seen as part of the macroprudential policy framework. Regional cooperation and harmonisation in all of these policy approaches is crucial.

This recognition of an international dimension to the issue of financial stability requires international co-ordination in order to avoid regulatory arbitrage or what is known as “the race to the bottom”. It is also acknowledged that the experience of APEC members, many long familiar with the implementation of macro-prudential policy tools in recent years possess different financial and economic structures that require national (or regional) oversight and that the imposition of global regulatory standards designed to remedy faults and weakness in the financial systems of advanced economies may be inappropriate and undesirable as it may harm the economic growth prospects of APEC economies and hinder the evolution of their financial systems.

Policy Recommendations

- **The use and implementation of macro-prudential policy tools designed to promote and achieve financial stability in the APEC region taking into consideration macro-economic objectives of sustainable economic growth, healthy capital inflows and the proper evolution of the financial system.**
- **The aim being to balance financial stability and the development of the APEC financial sector and infrastructure alongside an appropriate level of financial regulation and supervision that promotes economic development, meet the needs of savers and investors and provides liquidity and transparency.**
- **Macro-prudential supervisors should promote adequate capital adequacy requirements and adoption of countercyclical capital buffers and tools that mitigate the threat of excessive leverage.**
- **Policy should also include measures to help improve liquidity and avoid the risk of (and reduce the frequency of) systemic liquidity events. These include liquidity buffers, a core funding ratio and the imposition of a capital surcharge on liquidity.**
- **The real estate sector has typically played a major role in financial crises over the years and has been an asset class which attracts speculative portfolio inflows especially during periods of "cheap money", available leverage as well as lax regulatory supervision (which was evident in the Asian crisis in 1998). In this regard, an adjustable loan-to-value ratio has proved effective in mitigating credit pressures in the real estate market.**
- **Supervision of financial market infrastructure is crucial and there is merit in recommending a regional regulatory body with powers to co-ordinate and unify national regulatory forums and developments through the APEC area (e.g an Asian Financial Stability Dialogue). In addition as the structure of financial markets evolves in the region then attention needs to be paid to strengthening payment, clearing and settlement systems as well as promoting "best practice" business conduct and investor protection.**
- **Engage in dialogue with IMF and other national supervisory bodies etc but highlight the particular needs of APEC economies and avoid a "one size fits all" regulatory approach. Regulatory policies suitable for the advanced economies may be less suitable for APEC economies which have different financial and banking structures and have proved more immune to aspects of the financial crisis.**

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VTB Capital

Financial Stability: Policy Recommendations

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Prepared for ABAC Finance & Economic Working Group

Kuala Lumpur, 22 May 2012

- "The most difficult subjects can be explained to the most slow-witted man if he has not formed any idea of them already; but the simplest thing cannot be made clear to the most intelligent man if he is firmly persuaded that he knows already, without a shadow of doubt, what is laid before him."

  Leo Tolstoy… "The Kingdom of God Is Within You" 1894

Page 2

Issues At Focus For the ABAC FEWG in 2012

Global Imbalances, Monetary Policy and Stability of Fiat Currency

- Balance between the freedom of capital flows and the limitation of the accumulation of global imbalances
- Are the "uber-easy" monetary policy and the flat yield curves part of the quest for economic recovery or impediment to it?
- The danger from the "non-conventional" monetary policies

- **CHALLENGES**: implementation and completing the agenda
  : smooth transition to managing greater regulatory oversight
  : but keeping rules simple and understandable
  : don't strangle the banking and financial services industry
- **AIMS**: Financial stability and resilience…capital, liquidity buffers, solid infrastructure
  : better market discipline, transparency, stronger accounting standards
  : global co-ordinated rules, sound monetary and fiscal policies
  : end result-less leverage, better risk management, reduced moral hazard

"Bonfire of The Verities"

- The financial crisis exploded widely held assumptions about the working of the financial system…
- …such as the assumption that the financial system would be self stabilising
- …that financial innovation would improve risk management
- …and that low and stable inflation would guarantee economic stability
- …2 important lessons from every emerging market debt crisis is that contagion is always greater than policymakers anticipate….and that time is the enemy
- …a stable financial system is one that is resilient to a wide range of shocks and avoids costly booms and busts

Key Principles

- Pace of households debt expansion…Ireland 341%, Portugal 249%, UK 212%.
- Debt vs. GDP growth in DM …US 100%...Japan 250%.

What did financial crisis highlight?
-the interconnectedness of the financial sector with the real economy, the credit cycle
-counterparty risks in the banking and shadow banking sectors, systemic risk
-excess leverage, lax risk management, sovereign debt (un)sustainability

Key principles: resilience of the financial system, solid financial architecture
: broad macro-financial stability framework
: the need for co-ordinated (simple) global rules
: less leverage and more high-quality capital, improve risk profile
: less concentration of risk, stability of funding, accounting reform
: transparency, greater individual supervision of banks
: reduce moral hazard, clear resolution procedures

ABAC FEWG Letter 30 March: main points

- ABAC understands the importance of sound financial regulation in maintaining sustainable growth and stable financial systems
- …and that the issue of excessive speculative movements of capital across financial markets needs to be addressed
- …ABAC acknowledged that given the high level of connectivity in global financial markets, the impact of financial regulations extends beyond jurisdictional borders
- ABAC highlighted 2 issues: (1) due account be taken of cross border and extra-territorial effects of financial regulations requiring collaboration between the relevant authorities and (2) account be taken of the impact on market liquidity, pricing mechanisms amd market functionality in the region

Macro-Prudential Policy

- Macro-prudential policy
  - ✓ the objective-mitigating systemic risk across the credit cycle: risk migrates to where regulation is weakest
  - ✓ scope of analysis: transparency and consistency
  - ✓ powers and instrument: avoid excessive regulation and complexity
- System-wide approach required rather than firm-specific…direct costs of banking crises typically exceed 10% of GDP…plus cost to jobs and output
- Balance sheet tools include: maximum leverage ratios
  : counter cyclical capital and liquidity buffers
  : time-varying provisioning practices
- …all designed to influence level of leverage and maturity mismatch in the financial system
- Market structure tools: financial trading on organised trading platforms, central counterparties, targeted disclosure requirements, adjusting risk weights on intra-financial system activities
- …need appropriate fiscal policy and regulation to address solvency issues

Range of macroprudential tools

- Credit markets: direct lending controls, LTV ratios (caps can reduce procyclicality of credit growth by 80%), DTI caps, loan growth targets, fx lending controls, reserve requirements, credit/GDP ratio (5% threshold)
- Balance sheets: leverage ratio, more intensive supervision of SIFI's, deposit insurance premiums, interbank concentration limits, liqquidity ratios, provisioning policies, currency mismatch limits
- Bank stress tests, annual capital plans (Fed), supervisory guidance
- Measures to address capital flow volatility
- Other inputs: bank lending surveys, credit risk surveys, IMF's Global Financial Stability Report…central bank reports

- Basel 3 is not the end of the road…all jurisdictions need to commit…international consistency needed…update governance and management and resolution frameworks…strengthen oversight of shadow banking system

Regulatory Policy Initiatives

- Basel Committee: common equity standard (4.5% of risk weighted assets), counter-cyclical capital buffer, enhanced risk management, global liquidity standards, leverage ratios, SIFI surcharge requirements…Basel 3 as a global minimum standard…agreed December 2010…full implementation by 2019
- Dodd-Franks Act (848 pages long), end TBTF, raise capital, increase liquidity, implement orderly liquidation for SIFI's…the "Volcker Rule"…keep it simple…consolidate pre-crisis fragmented supervision…Financial Stability Oversight Council
- The Financial Stability Board: focuses on risks posed by systemically important banks : early warnings exercise, peer reviews
- European Systemic Risk Board, European Commission's "Alert Mechanism Report" on EU macroeconomic imbalances
- The G-20 Mutual Assessment Process: focus on "external sustainability"
- Macro and micro prudential policy: macro-reduce common exposures and interconnectedness, mitigate pro-cyclicality….micro-strengthen capital and liquidity buffers, enhance transparency….potential conflict with national domestic objectives…e.g the eurozone/UK?

Update on Regulatory Reforms

- Important implementation challenges remain which will be monitored by the FSB…priority areas include the Basel 3 capital and liquidity framework, policy measures for global SIFI's, domestic and cross-border resolution frameworks, OTC derivatives market reforms
- Basel 3 implementation is underway in several jurisdictions
- Implementation of revised global SIFI standards to be phased in from 2016
- The FSB requires jurisdictions to have resolution authorities with broad range of powers to resolve global SIFI's and ensure recovery and resolution plans are in place…requires enhanced cross-border cooperation
- Protecting retail banking>>>Volcker Rule… UK's Vickers Commission on ring fencing and minimum level of capital
- Shadow Banking…the FSB's task force in October 2011 set out principles for monitoring of the sector and assessing global trends and risks
- OTC derivatives: the program adopted in 2009 at the G-20 Pittsburgh Summit is progressing slowly…aim to improve transparency, resilience and regulatory oversight and clearing obligations/reporting rules

The Asian Perspective

- The 1998 crisis resulted in series of fiscal policy and regulatory reforms
- Long experience with macro prudential tools, reserve requirements, administrative guidance especially as regards real estate exposure
- In 2007-2009 crisis, APEC relatively immune…but not entirely so
- …due to trade links, international portfolio flows, eurozone crisis and credit squeeze due to eurozone bank deleveraging
- …volatility of cross-border capital flows, spill-overs from Fed QE policy

Policy Recommendations

- Increase focus and emphasis on financial stability as part of macro policy and regulatory approach in the APEC area
- Build on existing initiatives and programs within APEC to strengthen APEC financial system resilience and support macroprudential policy initiatives
- Unify and co-ordinate APEC voice as global stakeholder in global dialogue regards co-operation and consistence between national jurisdictions
- While supporting a global minimum standard in regulatory policy, emphasise longer term growth potential of APEC economies and need for regional oversight to ensure growth of the financial sector, financial inclusion and particular financing needs of the regional economies
- Urge greater focus on management of capital flows and reform of the international monetary system in reducing global imbalances

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Meeting Document Summary Sheet

Document Title: Asia Pacific Financial Architecture

Purpose: Update on progress and the Forum on the Asia Pacific Financial Markets Integration Project of the APEC Business Advisory Council held in Melbourne 13 March 2012

Issue: Promoting regional financial market integration

Background:

APEC Ministers in Honolulu in November 2011 pledged to take coordinated action to strengthen global recovery, reinforce financial stability, maintain open markets and build a foundation for strong, sustainable and balanced growth. Ministers welcomed inputs on improving collaboration among financial regulators to reflect and promote increasing regional financial market integration and for enhancing efficiency in capital markets. Ministers also recognized the role of ABAC and the private sector in supporting the concept of an Asian Regional Passport, and anticipated further development of the concept.

Taking up that challenge, a Forum was convened in Melbourne in March this year of policy makers, regulators, international institutions, business and academia to discus Asia Pacific Financial Market Integration. A key issue considered was why increased connectivity and coordination between markets in the region should be a priority and how it should be achieved. Underlying this theme was how the impact of underdevelopment in financial markets in Asian regional economies was reflected in the global financial crisis. There is a strong sense in ABAC that new initiatives need to be developed, and urgently, to:

- Promote enhanced regional financial market connectivity and integration
- Promote enhanced regulatory coordination and the regulatory objective of financial market stability
- Build market structures that will be necessary to service the massive investment needs of the region and to redress imbalances in global financial flows and the mismatch between savings and long-term investment needs in the region
- Buttress the region against future financial shocks.

Proposal /Recommendations:

- Develop an overarching and authoritative Forum to promote regional financial architecture, but one which involves existing entities that could also provide an Asian caucus in the G20
- It is proposed that a Forum be convened in Sydney in 2013 to agree and commence a program of work to be undertaken collegiately by participants and related groups. The ABAC Advisory Group on APEC Financial system Capacity Building which organised the Melbourne Forum should take a lead role in coordinating the work program
- Develop a regional strategy aimed at enhancing the environment for the investment of pension, retirement and life insurance funds in and across the markets of the region, taking account of the widely varying pension and funds management systems in regional economies
- Build a road map that would help economies move toward greater financial market connectivity and regulatory coordination, by reviewing common and uncommon regulatory

features of each economy ➢ Review possibilities to strengthen the "regionalization" of components of standards promoted by international standard setting bodies to reflect Asian economic conditions and institutional structures.
Decision Points: Endorse further action and recommendations.

Proposal to form the Asia-Pacific Financial Forum

The formation of the Asia Pacific Financial Forum is proposed as an important outcome of work undertaken at a recent ABAC inspired forum in Melbourne on 13th March 2012.

Background

There is broad consensus that Asia's current strong economic growth trajectory will be sustained well into the Century. A lesson learned from Asia's economic rise over the last three decades or so is that growth in trade and investment has been fostered by policies of openness and liberalisation, promoted through APEC, ASEAN and the WTO and various bilateral and regional agreements. Those policies have worked. They are essentially focused on removing barriers at the border and behind the border to promote trade and investment flow.

While openness and liberalisation in financial policies have been part of the success of the last three decades, they have not been fully exploited.

As a consequence, financial systems in the region are not at their full potential to support the real economy, both in a domestic market sense for many economies, nor in the sense of facilitating connectivity between markets.

APEC Ministers in Honolulu in November 2011 pledged to take coordinated action to strengthen global recovery, reinforce financial stability, maintain open markets and build a foundation for strong, sustainable and balanced growth. Ministers welcomed inputs on improving collaboration among financial regulators to reflect and promote increasing regional financial market integration and for enhancing efficiency in capital markets.

Taking up that challenge, a Forum was convened in Melbourne in March this year of policy makers, regulators, international institutions, business and academia to discus Asia Pacific Financial Market Integration. While considerable work is being undertaken to address shortcomings in financial market developments in the region, much more is required if the region is to attain the ambitious pledges made by APEC Ministers in Honolulu.

Issues considered at the Melbourne Forum

A key issue considered at the Melbourne Forum was why increased connectivity and coordination between markets in the region should be a priority and how it should be achieved. The answers are in the context of the pledges made by APEC Ministers in Honolulu.

The sharp impact of underdevelopment in financial markets in Asian regional economies was reflected in the global financial crisis, and remains a significant challenge in meeting the needs of the region.

- Credit growth within the region was severely constrained, yet the banking system was well capitalised, profitable and with relatively very low non-performing loans. This reflected an overreliance on liquidity being available from other major capital markets, which dried up in the crisis.
  Over-reliance on foreign markets leaves Asia vulnerable to external shocks.

- Longer-term investment needs in the region are not being effectively catered for because of underdeveloped capital markets in the region and the lack of connectivity between markets. This means that the high level of savings in regional economies is not being directly channelled into the investment needs of the region. This is a contributory factor to the global financial imbalance and to global financial instability.

- Capital markets are not playing an effective role in intermediation; as a consequence, savers have limited choice in the modes of savings in the region. Similarly, investors do not have available to them the whole array of instruments that facilitate risk mitigation, access to pools of local finance to fund infrastructure and financing through corporate bond issuance.

- The lack of or limited connectivity between capital markets means that the region is not benefitting from innovation in forms of capital raisings and that competition in financial systems is unnecessarily stifled. The complexity of differing rules and standards for raising mutual funds is a case in point. European funds managers find it easier to list and issue funds in Asia than Asian institutions because of different approaches to security issues in the jurisdictions of economies in the region.

Coordinated action is clearly necessary to strengthen global recovery. G20 and the Financial Stability Forum and APEC are strongly focused on the need for coordination.

- Asia's major contribution is to maintain and deepen the regional growth momentum over the decades ahead. This will support recovery in Europe, the US and globally, and ensure that the region plays its part in achieving balanced global growth and prosperity.

- Reinforcing financial stability in the region will strengthen the region against external shocks. It will also provide a more effective capacity for the region to play its full role in determining the rules and standards that will guide international financial markets into the future.

- Most importantly, enhanced connectivity between regional markets will mean better coordinated financial policies in Asia, with mature financial market structures serving the needs of savers and investors by increasing choice and lowering the costs of capital and transactions.

- It will aid further development of capital markets and promote greater financial inclusion. In addition, greater intermediation through capital markets will better equip regional economies to deal with the challenges arising from future demographic pressures, such as meeting the health and retirement needs of future retirees.

- Improved regulatory coordination in the region's banking systems will provide for consistency in the application of prudential standards and contribute to more efficient cross-border banking services. More generally, it will encourage regulators and policymakers to coalesce around consistent standards and practices.

(The voice of Asia in international standard setting bodies and in relevant multilateral institutions will better and more appropriately reflect the economic weight of the region in global financial and economic affairs).

How should the issues identified at the Melbourne forum be addressed?

- As noted earlier, much work is ongoing in the region to strengthen the region's financial systems; through for example, the Chiang Mai Initiative, the Asian Bond Funds Initiative, the multilateralisation of the Chiang Mai Initiative, the work of EMEAP and by other forums, including APEC.

- Missing however is an overarching and authoritative forum that is capable of bringing the various components of the system into a constructive and effective mechanism for coordinating activities that can promote coordinated actions to enhance financial markets and connectivity between markets.

- The region should attend to these issues by developing a Forum to promote regional financial architecture, but one which involves existing entities that could also inter alia provide an Asian caucus in the G20. An Asia Pacific Financial Forum responsible for coordinating the undertaking would involve the public and private sectors and key international institutions.

- Such a forum could move forward based on a combination of pathfinder initiatives (similar to models already in place in APEC), parallel programs for address varying needs and priorities of regional economies, and greater coordination to synergise those initiatives.

- The focus of work would be on priority areas that will have most significant impact on the objectives of building strong and efficient markets across the region and promoting convergence and connectivity.

- The attached detailed report of the Melbourne forum discusses the issues and priorities and an approach to deal with them. APEC should build on the work outlined in that report. To do this, it is proposed that a Forum be convened in Sydney in 2013 to agree and commence a program of work to be undertaken collegiately by participants and related groups. Ministers, senior policy makers, regulators, international organisations, business and academia will be invited. It should be recognised that this is a long-term project and will require commitment to see it through.

- ABAC Advisory Group on APEC Financial system Capacity Building which organised the Melbourne Forum should take a lead role in coordinating the work program for the proposed Sydney meeting and the Asia Pacific Financial Forum.

Ken Waller,
Australian APEC Study Centre at RMIT University 27th April 2012.

THE CAPACITY-BUILDINGADVISORY GROUP
ON APEC FINANCIAL SYSTEM

FORUM ON THE ASIA PACIFIC FINANCIAL MARKETS INTEGRATION PROJECT OF THE APEC BUSINESS ADVISORY COUNCIL, ABAC

REPORT AND OUTCOMES

MELBOURNE, 13TH MARCH 2012

A most successful and interactive Forum was held at the Council Chambers of RMIT University; it was opened by Professor Ian Palmer, Pro-Vice Chancellor, College of Business, RMIT, and chaired by Mr. Mark Johnson AO, ABAC Australia member and chair of the Advisory Group on APEC Financial System Capacity Building.

Around 40 invited guests participated. They included very senior representatives of financial policy and regulatory agencies of the region, private financial institutions, international financial institutions and financial academic research specialists. ABAC members John Prasetio, Indonesia, Wayne Golding, PNG, Anna Buduls and John W. H. Denton, Australia participated. Mr. Denton, Partner and CEO of Corrs Chambers Westgarth generously hosted lunch for all participants. An evening reception was hosted by RMIT College of Business.

The background note, the agenda and speakers and a list of participants will be shown as attachments to this note.

Background

The attached note provides details of the background and the objectives of the Forum. Briefly summarised, APEC Ministers in their Joint Ministerial Statement in Honolulu on 10th November 2011:

- agreed to take coordinated actions to strengthen the global recovery, reinforce stability (in the international financial system), maintain open markets and build a foundation for strong, sustainable and balanced growth

- welcomed inputs from ABAC on improving collaboration among financial market regulators to reflect and promote increasing regional financial market integration and to enhance efficiency in capital markets, and

- recognized the role of ABAC and the private sector in supporting the concept of an Asian Regional Passport, and anticipated further development of the concept.

The Asia Pacific region is directly impacted by strains in the global financial system, notwithstanding the important measures that are or have been implemented in the region following the Asian Financial crisis of 1997, such as the Chiang Mai Initiative and its multilateralisation, ASEAN+3 Macroeconomic Research (AMRO) and the Asian Bond Market Initiative.

Some regional economies are working in the G20 and through the G20 the Financial Stability Forum and other international standard setting bodies in promoting strengthened prudential standards to safeguard economies and the global financial system against a recurrence of the failures seen in the global financial crisis.

A primary driver of the Project is the strong sense in ABAC that new initiatives need to be developed, and urgently, to:

- promote enhanced regional financial market connectivity

- build market structures that will be necessary to service the massive investment needs of the region and to redress imbalances in global financial flows and the mismatch between savings and long-term investment needs in the region

- buttress the region against future financial shocks – to complement the work of the G20, the FSB and international standard setting bodies

Objectives set for the Forum

- to assess opportunities and challenges where public and private sectors can meaningfully collaborate to improve financial market integration, efficiencies, competitiveness and innovation, and at the same time ensure stable and prudent market structures

- to identify bottlenecks in existing structures and in market underdevelopment and to set a road map or a work program to ameliorate impediments to financial market structures and over the longer-term to contribute to regional financial market integration and to regional economic integration

- to recognize the value of emerging structures and work being undertaken by various groups, both in the region and beyond, to avoid duplicating those efforts but to add value to them through collaborative approaches involving public and private sector agencies and academia

- to consider additional structures needed to more fully engage business in collaboration with policy makers and regulators to achieve improved market efficiencies and connectivity and financial system stability

Key messages from the Forum

A detailed report of the Forum outcomes is circulated separately; below is a summary of the major themes and proposals that were considered:

Promoting regional financial market integration

(Specifically, regional integration is seen in the context of improved financial connectivity between markets in the region to facilitate the unimpaired development and delivery of financial services to savers and investors wherever they reside in the region).

- Despite there being six regional economies in the G20, regional financial integration is under-developed in the region, relative to trade flows and the economic size of the region; the direct recycling of regional savings into the region is disappointingly small and this despite efforts to build regional bond markets to utilize domestic savings and to diversify funds usage.

- An early step in promoting regional financial market integration is establishing liquid primary government bond and secondary markets in regional economies. Government bond markets provide a benchmark for the pricing of corporate bond issuance, and should contribute to the development of liquid markets in repos and over the counter and exchange traded derivatives, enable efficient and cost effective price discovery of risk within an economy and contribute to trading, clearing and settlement platforms, and encourage a broad and active domestic and foreign investor base.

- The value arising from connectivity between financial markets in the region arise through economic efficiencies, wider product choice by consumers, lower borrowing costs for governments and corporates, greater insulation from the vagaries arising from reliance on volatile international capital flows and greater resilience to financial system turbulence.

- Within the banking sector in Indonesia, some benefits are being generated as a consequence of a new requirement on major banks that they regularly publish their prime lending rates; greater competition is likely if banks generally published more data on fee structures; this should also be relevant to other economies in the region.

- While tangible progress has been made on several issues in enhancing regional financial architecture to improve financial market connectivity, such as in promoting local currency bond markets, credit guarantees and investment facilities (coordinated with the ADB) and SME financing through cross border CBO issuance, more work needs to be done and a road map designed as an enabler.
.
- Investor interest in long-term project financing would be encouraged by guarantees that provide for credit enhancement to mitigate against default risk.

Promoting enhanced regulatory coordination

- Important work is being undertaken by G20, the Financial Stability Board and international standard setting bodies and others to address the failures underpinning the global financial crisis.

- Far reaching measures are being implemented to buttress economies and the international financial system generally. However, careful assessment of some measures is called for to evaluate their relevance to Asian regional economies, particularly were they could be disruptive to smooth market operations; the call for central clearing counter parties is a case in point.

- Regional solutions may well be needed to address regulatory shortcomings and to insulate the region from future financial shocks.

- The key and over-riding regulatory objective is financial market stability; the regulatory approach should also contribute to efficiency and innovation in capital markets within the appropriate regulatory architecture and any necessary reforms to the financial system should be entirely compatible with system stability and efficiency and innovation

Primary factors in enhancing connectivity, integration and stability

- Building a regional framework needs sound foundations and structures to promote longer-term financial market regional integration and improved regulatory coordination.

- There are natural tensions between business interests in supporting regional financial market integration and those of regulators; for the latter, domestic stability interests are paramount while for former there are many complexities in managing cross-border business but cross-business models are increasing vital to support a customer base that operates in many jurisdictions

- A concept of regulatory harmonization between economies is less relevant than an approach which promotes ***consistency*** in goals and objectives to achieve financial system stability and outcomes that would enhance connectivity between markets and provide clarity to market participants – domestic and foreign – on what prudential and regulatory requirements are; consistency in the application of AML and FATCA regulations by regional regulators would be most helpful to financial institutions.

- Withholding and transactions taxes have negative impacts on investor participation in markets.

The way forward

Participants discussed the way forward under three headings which revolved around questions of "who are we and what is the mandate" (meaning the status of the Forum), how should the work of the Forum be organized and related to other relevant groupings and lastly, what are priorities and how a work program would be constituted. Taking these matters in order, the following reflects Forum outcomes. .

"Who are we and what is the mandate"

- The Forum represented in a broad way the various groupings that were invited, from policy and regulatory agencies, the private sector, academics and regional and international bodies. In effect it was a public private sector partnership (typical of others established by ABAC) and its mandate derived from the request of APEC Leaders and Ministers.

Organization of future work and relationships with other groupings

- A Forum should provide advice to APEC Ministers and to other relevant groupings on issues that are aimed at promoting a framework for enhancing regional financial market integration through improved efficiencies and innovation in systems and connectivity between financial markets in the region and in enhancing financial system stability

- Other regional groupings to which a Forum should relate are IMF, EMEAP, FSB, AMRO, the Asia Pacific Financial Forum, ADB, ADBI, BSBC, IAIS, IOSCO; but there are likely to be others and the various groups should be encouraged dialogue partners with the Forum as appropriate

- Advice provided by a Forum should be based on high quality analysis and data, objectively gathered and formulated by interested participants in the Forum, including public sector and regulatory agencies, business and academia and MFIs and regional think-tanks.

- Because greater coordination is already occurring between regional banking regulators and between regulators in the securities sectors, emphasis should be given to enhance cooperation in the pensions, savings and insurance sectors; nonetheless, relationships with and connectivity between these sectors and banking systems needs to be clearly recognized.

- There is a need to build a road map that would help economies move toward greater financial market connectivity and regulatory coordination; it should involve mutual recognition and promoting a sequence of activities that would be based on sound foundations.

Priorities and a work program

- Develop a regional strategy aimed at enhancing the environment for the investment of pension, retirement and life insurance funds in and across the markets of the region, taking account of the widely varying pension and funds management systems in regional economies

- Review common and uncommon regulatory features of each economy with a view to improving regulatory consistency in the region.

- Develop a road-block analysis of inhibitors to connectivity and to regulatory consistency, with a view to providing a road-map that could assist economies promote behind the border structural reforms within a comprehensive framework of reforms

- Review possibilities to strengthen the "regionalization" of components of standards promoted by international standard setting bodies to reflect Asian economic conditions and institutional structures.

Document: FEWG 32-013 Draft: **FIRST** Source: ABAC Papua New Guinea Date: 3 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet Template

Document Title: Report to FEWG
Purpose: For consideration and approval of actions recommended.
Issue: Promote practical solutions to support the importance of inclusiveness and access to finance for SMME's by getting health and retirement incomes back on APEC's agenda as an integral component of social inclusion.
Background: At the first meeting of ABAC 2012 it was agreed to pursue a program to promote health and retirement incomes on APEC's agenda. As a consequence Co-Chair Wayne Golding (ABAC PNG) and the coordinator of FEWG participated in a meeting convened at RMIT Melbourne on 14th March with experts from the pensions and actuarial profession, Dr. David Knox of Mercer and Dr. Jules Gribble, Actuary. The Director of the Australian APEC Study Centre at RMIT University subsequently spoke with Professor James Butler of the Australian National University who has previously advised ABAC on health systems in the region. The 14th March meeting agreed that AASC would make a proposal to AusAID for multi-year funding to meet demographic challenges in the region through the development of private pension systems and health systems readiness index. That proposal is now before AusAID. The proposal if approved would support the implementation in regional policy and regulatory agencies of sustainable sound private pension funds and health systems ***while recognizing the capacities of individual developing regional economies.*** Two readiness indexes – for pensions and health – will be developed to help regional economies identify and remedy gaps and weaknesses in pension and health systems, commensurate with their economic development and financial capacities. The "living indexes" will be first available in 2013, updated in 2015 and thereafter bi-annually as a guide on progress and a roadmap on measures to meet gaps. deliver high quality capacity building programs to develop and indexes and to promote policy and regulatory initiatives. It will lead to sustainable outcomes of a practical nature to guide policy developments in the APEC region. Both indexes will take account of demographic changes, economy size and growth. The pensions index will cover development of private pensions and capital markets, legislation and the role of regulators, labour force, public debt and publicy funded social security. The health index will relate to readiness to meet financing challenges to health care systems arising from demographics and technology challenges. It will take into account private health availability as an alternative to public coverage; payment mechanisms that encourage provider efficiencies; economic evaluation of health technology and policies to support determinants of

health other than health care. The health index will use data sets from the World Bank and the World Health Organisation.

Proposal /Recommendations:

- Support the proposed approach outlined above as a positive contribution to getting retirement and health systems on APEC's agenda in response to the challenges of longevity and sustainability.
- Agree that AASC may indicate ABAC support for the proposal to AusAID.
- Note that a note of progress will be presented for inclusion in ABAC's report to Finance Ministers and Leaders in 2012.

Decision Points:

- Endorse the recommendations outlined above.

Document: FEWG 32-020
Draft: **FIRST**
Source: ABAC China
Date: 8 May 2012
Meeting: Kuala Lumpur, Malaysia

Document Title:

Strengthen Cross-border Communication and Cooperation to Improve the International Credit Rating System

Purpose:

For consideration

Issue:

Financial Inclusion

Background:

The global financial crisis and the European sovereign debt crisis triggered a world-wide debate on more supervision over credit rating industry. With growing understanding of individual economies on the roles of credit rating agencies (CRAs) and their systematic influence on financial stability, there is more appeal on improving the international credit rating system. Attempts have been made to formulate new supervision policies and even to change the current operation model of CRAs. This report tries to describe briefly the recent development of major CRAs and views and practices to reform the credit rating industry, and puts forward some solutions and recommendations to improve the international credit rating system.

Proposal /Recommendations:

- Eliminate misunderstanding to have a correct knowledge on the roles of the credit rating industry.
- Adopt multiple measures to prevent conflict of interest, practice the investor-pay scheme.
- Reduce over-dependence on external credit ratings.
- Support and cultivate local CRAs.
- Strengthen cross-border communication and cooperation to promote the establishment of international rating standards.

Decision Points:

- Endorse the recommendations outlined above.

Strengthen Cross-border Communication and Cooperation to Improve the International Credit Rating System

ABAC China Member Wang Lili

The global financial crisis and the European sovereign debt crisis triggered a world-wide debate on more supervision over credit rating industry. With growing understanding of individual economies on the roles of credit rating agencies (CRAs) and their systematic influence on financial stability, there is more appeal on improving the international credit ratings system. Attempts have been made to formulate new supervision policies and even to change the current operation model of CRAs. This report tries to describe briefly the recent development of major CRAs and views and practices to reform the credit rating industry, and puts forward some solutions and recommendations to improve the international credit rating system.

I. Recent development of international CRAs.

1.Recent moves of major international CRAs in rating results.

According to incomplete information, from October 2009, when Standard & Poor's, Moody's and Fitch downgraded the sovereign rating of Greece till this February, the three major CRAs have downgraded or released downgrade warnings by 64 times the sovereign rating of European economies, the United States and Australia, rating of European commercial banks and financial stability instrument. That means 2.2 downgrading move each month on average, incurring immeasurable direct economic losses. According to IMF, among the above at least 9 downgrading of sovereign rating were made by fault.(During the Financial Crisis in 2008 there were also at least 9 downgrading of sovereign rating by mistake).The three major CRAs are also questioned for constant mistakes made in the rating of structured financial products and corporate bonds.

At the same time, some other players of the industry are actively engaged in the global market competition. In July 2010, Dagong Global Credit Rating, a renowned CRA in China released for the first time its sovereign rating results for 50 economies. In July 2011, Dagong released a rating report for commercial banks in Malaysia. Japan Credit Rating Agency and Rating & Investment Information Center of Japan have also increased the number of their sovereign rating results from 20 economies in 2000 to 81 economies in 2010.

2. Comment of international society on CRAs.

Instead of providing predictable rating information for the market, consecutive moves by the three major CRAs to downgrade the sovereign rating of European and U.S. economies trigger out market panic, allowing the European Sovereign debt crisis to spread from marginal economies to core economies like Italy, France and Germany, making the international financial market even more fluctuating. At the same time, they always under-evaluate the sovereign rating of some emerging economies like China and give constant negative outlooks, this lead to wide questioning from governments and business sectors. Such practices are deemed as inducing speculation in financial market, and are actually the same as what they did in the financial crisis in year 2008.

To conclude, around the globe people are unsatisfied about CRAs with their ratings quality and results, especially with their lack of foresightedness. The industry is regarded as playing a pro cyclical role in the whole economic cycle, exacerbated by macroeconomic cyclical fluctuations. In short term, moves of CRAs to readjust their rating results in sensitive period magnify economic and financial instability. Meanwhile, the independency of CRAs is reduced by lack of transparency in their rating methodology and internal procedures, high market monopoly and possible conflict of interest between internal business segments. Also, too much reliance on external rating by some regulators and investors might incur moral risk and lack of accountability, and allow the rating industry to have excessive influence on the market.

3. Self improvement by international CRAs.

Since the financial crisis, the three major CRAs also try to make self improvement on the basis of market criticism and regulatory recommendations. Measures are adopted to improve the quality of rating results, by gapping the comparability between corporate bond and Muni bond ratings, enhancing the rating model for structured products, and adjusting the rating methodology for banks and corporations. Moody's and S&P are putting more emphasis on evaluation of macro economy. Moody's sets up a special committee to improve its internal coherence of macro economies evaluation. S&P revised its rating standards for banks, by introducing elements of economy risk and external support, and readjusted its rating for several dozens of major financial institutions around the world in November 2011. Information transparency is also improved. In accordance with the newly published regulation on credit ratings by economies around the world, the three major CRAs are releasing their rating method and procedures. They try to communicate more with investors over major revision of rating results, in an attempt to improve the transparency of their rating instruments, solutions, analysis method, data, and research. Efforts have also been made to enhance corporate governance. Fitch set up Fitch Solutions to separate its rating business from non-rating business. Moody's put in place a global compliance unit, diverted more resource from its analysis units to internal compliance and supporting units, and set up a devoted track rating team. S&P hired independent directors, set up a Policy Governance Group and a Risk Governance Group. In August 2011, S&P downgraded the sovereign rating of U.S. with an attitude of "surpassing the interest of its home economy", in an attempt to restore its public creditability for its own commercial interest.

II. Recent views and practices to reform international credit rating industry.

After the financial crisis, global community has greatly changed its regulatory standards on rating industry. Steps have been taken by international organizations and individual economies to speed up supervision structure in terms of both basic statute and regulatory schemes.

1. Reform trend and features of international credit rating industry.

In an attempt to rectify the practice of the three major CRAs in this crisis, international organizations and economies including the U.S. and EU roll out measures to reform supervision over rating industry, greatly changing the operation environment of the industry. Devoted supervision authorities are set up to fill in the vacancy of no supervisor or lack of a devoted supervisor. CRAs now need to apply for license or register for business operation. Stronger or overall supervision is taking the place of self-discipline or supervision vacuum. Relevant rules are revised to allow less or no application of external rating results; major investors are encouraged to set up their internal rating system, to avoid application or over-reliance on external rating results. Market entry standards are lowered to avoid high market concentration or monopoly and to improve market competition. Local CRAs are being recognized to break monopoly of the global market by the three major players. Investor-pay practice is being adopted besides the issuer-pay model.

2. Global legislation on credit rating industry.

The APEC Hawaii Summit in 2011 called for an overall evaluation of the rating industry. G20 proposed to strengthen industry supervision and cooperation among supervisors, called for CRAs to abide by industry standards and to prevent conflict of interest, and for less reliance on external rating results. Under this framework, Financial Stability Board (FSB), International Organization of Securities Commissions (IOSCO), Basel Committee on Banking Supervision (BCBS) and other international organizations work together in accordance with the Code of Conduct for Credit Rating Agencies revised by IOSCO and the Advanced Principles proposed by FSB in October 2010 to improve the code of conduct for CRAs. They coordinate for coherence of supervision regulations of different economies, formulate rules to reduce over-reliance by regulators and financial institutions on external rating results, and reduce improper incentives caused by application of external rating under the framework of prudent regulation. IMF and World Bank are also carrying out positive study of the industry to lay out relevant policy and recommendations.

Besides international organizations, individual economies are speeding up regulation and legislation to put the previously self-disciplined industry under market entry registration and direct supervision. Acts formulated in this aspect as basic law include the Dodd-Frank Wall Street Reform and Consumer Protection Act (the DODD-FRANK ACT) and the Credit Rating Agency Reform Act of U.S., the European Regulation on Credit Rating Agencies, Financial Instruments and Exchange Law of Japan, etc. Regulations newly formulated include Regulations of U.S on Credit Rating Agencies Registered as NRSRO, Regulatory Rules of the EU on Credit Rating Agencies-Guidelines on the Application of Endorsemen, Regulatory Rules of India on Credit Rating Agencies, Guidelines on the Registration of Credit Rating Agencies of Malaysia, etc. Economies include U.S., EU, Japan have made supervision of the rating industry part of their basic law. While Australia, Canada, India, Malaysia, South Korea, Mexico, Hong Kong, China, Singapore and South Africa are carrying out supervision by formulating or revising the rules of relevant government authorities.

3. Main reform practices of international credit rating industry.

International organizations and individual economies are drawing lessons from the financial crisis and putting forward reform measures. Some economies are strengthening existing regulators or setting up devoted supervisors for the industry, carrying out classified supervision for CRAs, and reducing market entry standards. To reduce conflict of interest, a series of measures are being adopted to improve the internal governance of CRAs, strengthen accountability of CRAs, enhance their information disclosure transparency, and to diversify their payment model. To reduce reliance on external rating, reform of rating agencies is being made part of macro prudency policy, and measures are implemented to reduce reliance on rating results by reforming supervision standards, laws and regulations and changing the internal risk management and investment decision making of financial institutions. In terms of sovereign rating, IMF has made sovereign rating result part of factors that impact financial stability, and is urging CRAs to make sovereign rating more transparent, and to improve their methodology and procedures in this aspect. In terms of regional rating agencies, EU plans to set up in the first half of 2012 a fund raised by 30 investors from financial sector, with each investor raising 10 million Euro. Under this framework, investors will pay for CRAs and CRAs will be rotated on a regular basis. Ratings will be released from the second half of 2012, and investors will be repaid in cash in the coming 5 to 7 years. The founding company Roland Berger Strategy Consultants has not got support from major banks from economies like Germany and France, so its preparation is funded by only limited funds raised from investors. In regard to international communication and cooperation, there is consensus among international financial regulators. Securities and Exchange Commission (SEC) said in March 2012 that it has signed a memorandum of understanding with European Securities and Markets Authority (ESMA) and the Monetary Authority of Cayman Islands on cross-border cooperation of financial regulation, under which rules made for supervision cooperation over CRAs are even more detailed than that for the supervision of regular financial institutions. In the same month ESMA said it recognizes that the regulatory systems for CRAs in U.S. Canada, Hong Kong and Singapore are similarly strict and reliable as that of the EU, leading to a total of six economies around the world that mutually recognize the rating results with each other. South Africa and Canada are also trying to work out regulatory frameworks in line with international and EU standards, so as to meet the definition of IOSCO and G20.

III. Thoughts and proposals to enhance the international credit rating system.

We are witnessing some progresses in regulation arrangement since the financial crisis, yet the restructuring of international credit rating system needs to be pushed forward on the basis of lessons drawn from the crisis, as well as the rules of development of the credit economy and credit industry.

1. Eliminate misunderstanding to have a correct knowledge on the roles of the credit rating industry.

IMF identifies the role of CRAs as to provide information, risk surveillance and credit recognition. CRAs need to rectify themselves by these standards, yet the public should also be guided to remove their excessive expectation on CRAs to enable the latter to play their due role. The general public should understand that the global credit industry is dependant on the credit situation of each economy. Credit globalization means risk globalization. So the partial risk of an individual economy may grow into a systematic risk, and whether an individual economy is able to properly reveal its own credit risk has close impact on the credit security of other economies. Therefore, the credit rating system of an individual economy is also part of the global credit rating system. Meanwhile, it should be understood that CRAs are not always functional. It is inevitable that credit rating, as prediction and judgment for the future solvency and risk level of the rated objectives, might not be in accordance with the real situation. Sensible judgment could only be made on the basis of reliable and sufficient information and correct argumentation. So the market should have an objective view on the role of CRAs, and regard their rating results as only a reference for risk decision making. At the same time, external rating agencies have their own value, in that they should be deemed as a useful supplementation of internal rating. For both the issuers and investors, external rating can greatly save transaction costs incurred by mismatch of information, and is especially cost-effective for small and medium investors. External rating agencies can get through field study first-hand information which is not easily available for individual investors. This is also an advantage of external rating over the internal rating of investors.

2. Adopt multiple measures to prevent conflict of interest, practice the investor-pay model.

International CRAs should implement effective internal control and operation system. A firewall should be put in place between their rating and non-rating business to effectively separate the two parts. In terms of corporate governance, independent directors should play a full role; attempts should be made to introduce investors' representatives to credit rating approval committee to make rating results more objective and fair. With respect to internal control, compliance unit should check on regular basis major changes in rating assumption, modeling and method, and report directly to external directors and investors' representatives to make rating results more transparent and reliable. In regard to working team management, employees need to be certified for their job, rotate their positions and review their historical rating results. To improve transparency, more information should be disclosed on a more frequent basis on rating methodology, rating income source, rating outcome performance, and structured financial products rating. CRAs need to educate the public more in this aspect. At the same time, to eliminate the source of interest conflict, rating results could be paid by investors or the industry associations which represent the investors, so as to cut off the interest interaction between CRAs and issuers, and to make the rating results more objective, independent and fair.

3. Reduce over-dependence on external rating.

This is also in line with the proposal of G20 and FSB. Over-reliance on external credit rating is one of the lessons of the financial crisis. One proposal is that international organizations and regulators of individual economies gradually remove regulatory requirements on direct application of external rating results. The market should be allowed to make its choice on whether to accept these rating results or not, while CRAs should be guided to truly serve investors. In this way, market will urge CRAs to improve the quality of their rating results, and the rating industry will then restore its original role as a provider of information and market risk surveillance. Besides that, in view of the important reference of external rating in capital risk pricing, and its systematic influence on the financial market and macro economy, regulatory authorities need to strengthen certification management of the industry, formulate certification standards and improve market entry and exit mechanism. Different from retail investors, big financial institutions should make full use of their own information and R&D capability to make independent evaluation of credit risks, while using external rating as only one of their references, instead of the sole reference. This will also help to reduce the pro-cycle role of just a few players in the market, and prevent investors from blindly following the trend.

4. Support and cultivate local rating agencies.

As an important part of the international credit rating system, local CRAs from each economy have important role to play in safeguarding financial security. In this connection, efforts need to be made to support the development of local CRAs, and facilitate sensible competition among domestic and international CRAs. Regulatory rules need to be improved to identify the role of credit rating in legislation, policy formulation, regulation and information disclosure. Regulatory and market resources need to be integrated to perform better supervision over rating agencies. On the other hand, solutions need to be found for the challenges of the industry. Local CRAs should improve their corporate governance, rating procedures and methods, put in place the operation philosophy of serving the investors, build up their market position and meet international market standards. At the same time, growing of local rating system should be combined with the building of domestic bond market and cross-border economic activities. Rating results of local CRAs should be used to guarantee the security of overseas investment. Local rating agencies need to learn advanced technology and management experience from overseas to improve competition and internal strength, and to develop by competition, merger and acquisition.

5. Improve cross-border communication and cooperation to promote the establishment of international rating standards.

In the process of forming the international credit rating system, both international and local CRAs need to establish their credibility. To this end, CRAs need to improve quality of their rating results, and different government authorities also need to put in place a mechanism for joint-supervision and industrial self-discipline. Individual economies need to strengthen exchanges of technology, research, and market, integrate their credit rating resources, grant to each other's CRAs market entry and recognition facility, so as to strive for coordinated and sustainable development of regional or domestic CRAs through information and resource sharing. Currently the EU is trying to set up its own pan-Europe CRA. The continuous growth of economic scale and rapid development of bond market in Asia calls for credit rating that reflects the situation of the region. So setting up a regional (Asian) CRA could be one of the solutions in this regard. If necessary, we propose that the FEWG of ABAC to study further in this aspect and put forward more detailed proposals.

Document: FEWG 32-027 Draft: **FIRST** Source: ABAC Japan Date: 15 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title:
ABAC Dialogue with Finance Ministers, Moscow

Purpose:
For Discussion and Consideration

Issue:
Proposals for the structure of 2012 ABAC Dialogue with Finance Ministers and initial paper on key ABAC recommendations on finance with concrete outcomes and timelines.

Background:
In a discussion with the Advisory Group Coordinator in Moscow in April, the SFOM Chair proposed initial ideas on the 2012 ABAC Dialogue with Finance Ministers and requested to be provided after ABAC II a list of ABAC's most important recommendations on finance with concrete outcomes and timelines.

Proposal /Recommendations:

- ABAC to discuss the proposed elements of the 2012 Dialogue with Finance Ministers and agree on any additional suggestions.
- ABAC to agree on submitting a preliminary list of key recommendations with outcomes and timelines to the SFOM Chair, with a note that a complete list will be submitted after ABAC III, when the full ABAC Report to the APEC Finance Ministers will have been approved.

Decision Points:

- Endorse the recommendations outlined above.

ABAC Dialogue with Finance Ministers in Moscow

1 The APEC Finance Ministers Meeting (AFMM) is scheduled to be held in Moscow on 30 August 2012 (Thursday).

2 The APEC Senior Finance Officials Meeting (SFOM) Chair, Mr. Andrei Bokarev, of the Russian Ministry of Finance, informed me during my visit to Moscow last April that they are looking forward to hosting the ABAC Dialogue with the Finance Ministers as part of the AFMM program.

3 Mr. Bokarev disclosed to me the Ministry's initial ideas about the dialogue, which are as follows:

3.1 They would like to organize a very interactive and informal dialogue, with less presentations and more open discussions.

3.2 They prefer a dialogue with concrete outcomes.

3.3 They are considering a one- to one-and-a-half hour dialogue focused on one topic that is broad enough to cover various sub-topics. A possible topic is public-private sector collaboration.

4 The Russian Ministry of Finance would appreciate ABAC FEWG's feedback and further suggestions, and would be happy to work with ABAC FEWG in preparing the dialogue.

5 Mr. Bokarev indicated he would be happy to discuss this further at the upcoming APEC SFOM in St. Petersburg on June 28-29.

6 The Russian Ministry of Finance also requested to be provided after ABAC II a list of ABAC's most important <u>recommendations on finance with concrete outcomes and timelines</u>, which they need for the Russian Government's preparation of a list of deliverables for APEC 2012. As I mentioned to him that our recommendations will only be finalized at ABAC III in July, he acknowledged that the list would be considered preliminary, and will look forward to receiving a full list of our recommendations in July or August. Attached for FEWG's consideration in the Annex to this paper is a proposed preliminary list of these key recommendations that have either already been endorsed by ABAC in the past or are expected to be endorsed at ABAC II in Kuala Lumpur.

J.C. Parrenas
Staffer, ABAC Japan
Coordinator, Advisory Group on APEC Financial System Capacity Building

ANNEX

Key ABAC Recommendations on Finance: Concrete Outcomes and Timelines

1. Establishment of the Asia-Pacific Financial Forum (APFF)

A recent forum of finance and regulatory authorities, private sector, international organizations and academic experts convened in Melbourne proposed the establishment of the APFF. It is intended to serve as a platform for these entities to collaborate in effecting greater coherence and synergy among existing and new initiatives aimed at further developing financial markets in the region and enhancing their connectivity. It is also intended to help consolidate regional inputs to global financial regulatory reforms and standard setting processes to better reflect the region's aspirations and financial market conditions. The APFF is expected to move forward based on a combination of pathfinder initiatives, parallel programs for address varying needs and priorities of economies at different stages of development, and greater coordination to synergize those initiatives. Its work will focus on priority areas that will have most significant impact building strong and efficient markets across the region and promoting convergence and connectivity.

Timelines:

- 2012 March 13 – Melbourne, Australia: Forum resulted in recommendation to establish APFF
- 2012 June 28-29 – St. Petersburg, Russian Federation: Initial ABAC presentation to SFOM
- 2012 August 30 – Moscow, Russian Federation: Discussion during the ABAC Dialogue with Finance Ministers; schedule of APFF Inaugural Meeting to be announced; AFMM to encourage participation of economies in APFF (*TBC*)
- 2012 October 10 or 11 – Tokyo, Japan: Short meeting (before IMF/WB Annual Meeting) among interested pathfinder participants from finance and regulatory authorities, private sector, international organizations to develop APFF work program and Inaugural Meeting agenda (*TBC*)
- 2013 First Quarter – APFF Inaugural Meeting (*TBC*)

2. Asia-Pacific Infrastructure Partnership (APIP) Dialogues

There is huge demand for infrastructure investment necessary for continued economic growth, which public sector investment alone cannot meet. Despite recent improvements in infrastructure-related policies, key constraints impeding private investment remain. Overcoming these constraints requires improved understanding and greater trust among relevant parties involved. Structures enabling parties to frankly and objectively discuss and consider complex matters facing each economy can contribute to better understanding of the issues and risks they face and conducive environments for private financing of infrastructure. In 2010, ABAC proposed APIP as a regional structure to bring together high-level officials, experts and private sector advisory panelists from a wide range of relevant fields. This model, which draws from successful experiences in the region, utilizes ABAC's private sector network. Successful dialogues were held with Mexico, Peru and the Philippines in 2011. Presently, preparations are being undertaken for dialogues with the governments of Indonesia, the Russian Federation, Thailand and Vietnam with the APIP private sector panel in collaboration with multilateral institutions (ADB, IDB, IFC and WB).

Timelines:

- 2012 June 28-29 – St. Petersburg, Russian Federation: ABAC update to SFOM

- 2012 July 20 – Hanoi, Vietnam: APIP Dialogue with the Vietnamese Government (TBC)
- 2012 August – Moscow, Russian Federation: APIP Dialogue with the Russian Federation (TBC)
- 2012 August 30 – Moscow, Russian Federation: Discussion during the ABAC Dialogue with Finance Ministers and identification of economies interested in holding dialogues in 2013 (*TBC*)
- 2012 Second Semester – Bangkok, Thailand: APIP Dialogue with the Thai Government (*TBC*)
- 2012 Fourth Quarter – Jakarta, Indonesia: APIP Dialogue with the Indonesian Government (*TBC*)

3. Promoting Public-Private Collaboration in Advancing Financial Inclusion

Improved access to finance in the region remains a major challenge. With growing constraints on public resources, mobilizing private resources to serve financial needs of low-income households and small enterprises has become ever more important. There is a need for public and private sectors to collaborate more closely and coordinate their efforts. To this end, ABAC works with other key institutions to discuss this issue through an annual Financial Inclusion Forum. An initial forum in May 2010 focused on how to provide enabling environments to extend the reach of microfinance, improve its commercial viability, and increase private investment in MFIs. The next forum in September 2011 focused on new channels to serve the financial needs of the unbanked, and how APEC can harness regional public-private cooperation to promote the sustainability and expansion of undertakings using these new channels. The third forum to be held in June 2012 will focus on the key areas of financial literacy, financial identity, proportionality of regulations and consumer protection, as well as linking microfinance to remittances. ABAC looks forward to continue working with APEC economies through dialogues in 2013 and 2014.

Timelines:

- 2012 June 25-26 – Shanghai, People's Republic of China: Asia-Pacific Financial Inclusion Forum
- 2012 July – Approval of Forum Report and recommendations by ABAC, submission to APEC Finance Ministers
- 2012 August 30 – Moscow, Russian Federation: Discussion during the ABAC Dialogue with Finance Ministers and identification of issues for the 2013 Forum (*TBC*)
- 2013 Second Semester – 2013 Financial Inclusion Forum
- 2013 Second Semester – Submission of report to APEC Finance Ministers
- 2014 Second Semester – 2014 Financial Inclusion Forum
- 2014 Second Semester – Submission of report to APEC Finance Ministers

<u>Note</u>: This is a preliminary list of key ABAC recommendations on finance. ABAC is currently developing a full report to APEC Finance Ministers for 2012, which will be completed in July. Accordingly, a complete list will be submitted to the AFMM Chair/SFOM Chair together with the full ABAC 2012 Report to the APEC Finance Ministers.

Document: FEWG 32-016 Draft: **SECOND** Source: ABAC Japan Date: 8 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title:
Report to ABAC – Unintended consequences of the implementation of new financial regulations

Purpose:
For Information

Issue:
Letter on Financial Regulations to Relevant Authorities

Background:

ABAC FEWG agreed in Hong Kong that the implementation of new financial regulations could have unintended consequences negatively affecting the region's economies and the financial markets.
In line with a proposal from ABAC Japan, ABAC FEWG agreed to discuss and draft a letter on this issue from ABAC to relevant authorities.
As no objection nor further comments have been received from ABAC members to the circulated letter drafted by ABAC Japan, ABAC has sent the letter to FRB, IMF, Basel Committee on Banking Supervision and the Chair of APEC Finance Ministers' Meeting last April.

Proposal /Recommendations:

ABAC submitted the following recommendations to relevant authorities:

- Relevant authorities should collaborate with each other in taking due account of the cross-border and extraterritorial effects of financial regulations.
- Relevant authorities should take due account of the unintended consequences for market makers across the region and the real economy of new regulations that unduly constrain market liquidity, hinder pricing mechanisms and distort markets.
- Relevant authorities should consider carefully and review the implementation of new financial regulations with a view to avoiding pro-cyclical effects on APEC economies and ensuring the region's continued growth and prosperity.

Decision Points:
- N/A

Ziyavudin Magomedov
ABAC Chair 2012

April 3, 2012

Mr. Wayne Byres
Secretary General
Basel Committee on Banking Supervision
Centralbahnplatz 2
CH-4002 Basel, Switzerland

Dear Mr. Byres:

The APEC Business Advisory Council ("ABAC") is the formal private sector advisory group of the Asia-Pacific Economic Cooperation ("APEC") Forum. Representing the business communities of all 21 APEC member economies, ABAC is tasked with ensuring the success of APEC by providing private sector insights on how best to achieve APEC's goals, both through APEC's own initiatives, and in dialogue with other international organizations.

ABAC supports APEC's goal of accelerating trade and investment liberalization and promoting regional economic integration, as well as efforts to promote capacity building to develop financial markets and encourage greater regulatory coherence. We are deeply concerned about the Eurozone debt crisis, and look to individual and collective efforts by APEC economies and dialogue among relevant authorities in safeguarding the overall stability of financial systems within and beyond our region.

ABAC understands the importance of sound financial regulation in maintaining sustainable growth and stable financial systems. In particular, we agree that the issue of excessive speculative movements of capital across financial markets needs to be addressed. We note, however, that given the high-level of connectivity among today's markets, the impact of financial regulations extend beyond jurisdictional borders and can spread quickly, deeply and extensively across multiple financial markets.

ABAC is concerned that new financial regulations being introduced in some jurisdictions may have unintended and unpredictable consequences affecting other markets that could impede the healthy growth of our economies. We urge relevant authorities in APEC member economies to address these concerns.

We particularly request your kind attention on the following two issues.

First, we request that due account be taken of the cross-border and extraterritorial effects of financial regulations and that relevant authorities collaborate with each other in addressing these concerns.

Second, we would like to point out the unintended consequences for market makers across the region and the real economy of new regulations that unduly constrain market liquidity, hinder

pricing mechanisms and distort markets. The requirement to provide counter party information on a cross-border basis is also an issue that we believe requires more careful consideration.

Given the current unstable and uncertain economic circumstances, ABAC highly appreciates your further careful consideration and review of new financial regulations with a view to avoiding pro-cyclical effects on APEC economies and ensuring our region's continued growth and prosperity.

Respectfully yours,

Ziyavudin G. Magomedov	**John W. H. Denton**
ABAC Chair 2012	Chair, ABAC Finance & Economics Working Group

Ziyavudin Magomedov
ABAC Chair 2012

April 3, 2012

The Honorable Anton G. Siluanov
Chair, APEC Finance Ministers' Meeting
Minister of Finance
Russian Federation

Dear Minister Siluanov:

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Respectfully yours,

Ziyavudin G. Magomedov	**John W. H. Denton**
ABAC Chair 2012	Chair, ABAC Finance & Economics Working Group

Ziyavudin Magomedov
ABAC Chair 2012

April 3, 2012

The Honorable Ben S. Bernanke
Chairman
Board of Governors
Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington D.C. 20551

Dear Chairman Bernanke:

The APEC Business Advisory Council ("ABAC") is the formal private sector advisory group of the Asia-Pacific Economic Cooperation ("APEC") Forum. Representing the business communities of all 21 APEC member economies, ABAC is tasked with ensuring the success of APEC by providing private sector insights on how best to achieve APEC's goals, both through APEC's own initiatives, and in dialogue with other international organizations.

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Given the current unstable and uncertain economic circumstances, ABAC highly appreciates your further careful consideration and review of new financial regulations with a view to avoiding pro-cyclical effects on APEC economies and ensuring our region's continued growth and prosperity.

Respectfully yours,

Ziyavudin G. Magomedov
ABAC Chair 2012

John W. H. Denton
Chair, ABAC Finance & Economics Working Group

April 3, 2012

Ms. Christine Lagarde
Managing Director
International Monetary Fund
700 19th Street, N.W.,
Washington, D.C. 20431

Dear Ms. Lagarde:

The APEC Business Advisory Council ("ABAC") is the formal private sector advisory group of the Asia-Pacific Economic Cooperation ("APEC") Forum. Representing the business communities of all 21 APEC member economies, ABAC is tasked with ensuring the success of APEC by providing private sector insights on how best to achieve APEC's goals, both through APEC's own initiatives, and in dialogue with other international organizations.

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Given the current unstable and uncertain economic circumstances, ABAC highly appreciates your further careful consideration and review of new financial regulations with a view to avoiding pro-cyclical effects on APEC economies and ensuring our region's continued growth and prosperity.

Respectfully yours,

Ziyavudin G. Magomedov
ABAC Chair 2012

John W. H. Denton
Chair, ABAC Finance & Economics Working Group

Document: FEWG 32-015 Draft: **FIRST** Source: FEWG Chair Date: 4 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title: Response Letter on IFRS Roundtable to ABAC Chair and ABAC FEWG Chair
Purpose: Discuss arrangements and format of policy discussion on IFRS
Issue: Organizing a roundtable policy dialogue concerning IFRS
Background: The APEC Economic Committee Chair requests to hold a roundtable policy dialogue concerning IFRS at the second meeting of the Economic Committee in Kazan, Russia. The draft agenda for the meeting tentatively scheduled for May 30-31 is being drawn up and the Chair wishes to agree on a format for discussion and speaker arrangements.
Decision Points: Endorse further action.

APEC

Asia-Pacific
Economic Cooperation

23 March 2012

Dear John W.H. Denton
Dear Ziyavudin Magomedov

Thank you for your letter outlining ABAC's 2011 Report to the APEC Economic Leaders and its recommendations on IFRS. We would be very interested in working with you to organize a roundtable policy dialogue concerning this issue at the second meeting of the Economic Committee in Kazan, Russia. The meeting is tentatively scheduled for the 30-31 of May.

We think holding a policy discussion on IFRS would be a great opportunity to further explore ABAC's views on the issue and also hear economies' perspectives. We are currently drafting our agenda for the meeting, but our policy discussions in the past have lasted approximately 1.5 hours, and we feel that we could tentatively schedule this dialogue for that amount of time. To move forward we need to agree on a format for the discussion and start arranging speakers/presenters. We look forward to working with you.

Sincerely,

Emily Fischer

Emily Fischer
On behalf of the APEC Economic Committee Chair

Document: FEWG 32-024 Draft: **FIRST** Source: ABAC Japan Date: 8 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title:
ABAC/APEC IFRS Dialogue in Kazan

Purpose:
For Discussion

Issue:
IFRS Revenue Recognition

Background:

In 2011, ABAC recommended the establishment of a task force to discuss studies on the smooth introduction of IFRS and to ensure appropriate coordination among IASB, FASB, APEC and ABAC. In accordance with this recommendation, APEC New Zealand and APEC Japan requested the support and cooperation of ABAC in holding an IFRS dialogue for wide-ranging discussions at SOM/EC in Russia.
Following endorsement of this idea in Hong Kong, ABAC has been cooperating with APEC officials in organizing the dialogue at SOM/EC on May 30 in Kazan.
At the dialogue in Kazan, ABAC plans to raise the issues of lease accounting, insurance contract and revenue recognition for the following reasons:
- As previously discussed, ABAC continues to have concerns on some of the newly proposed accounting standards such as lease accounting (IAS17) and insurance contract (IFRS4).
- In addition, the proposed change in revenue recognition may have significant business and economic impact, such as through additional costs of complying with disclosure requirements.

ABAC is concerned about significant negative business and economic impact of the implementation of IFRS, including its impact on availability of financing for SMEs, and additional costs for companies and customers.

Proposal /Recommendations:

- ABAC supports the implementation of IFRS, but recommends an impact analysis be undertaken of certain provisions, and suitable adjustments be made to avoid negative business and economic impact.
- ABAC recommends further dialogue among IASB, FASB, APEC and ABAC to promote the smooth implementation of IFRS in the region.

Decision Points:
- Endorse the recommendations outlined above.

Document: FEWG 32-025 Draft: **FIRST** Source: ABAC Japan Date: 8 May 2012 Meeting: Kuala Lumpur, Malaysia

Meeting Document Summary Sheet

Document Title:
Accommodation of Emerging Economies' Currencies Internationalization

Purpose:
For Discussion and Consideration

Issue:
Report of Emerging Economies' Currencies Internationalization Research

Background:
With the rise of emerging economies, it is natural to expect their currencies to play more important roles in the region/global markets, particularly for trade settlement and investment, and as anchor currencies to stabilize the regional financial markets/economies in times of turmoil in other regions.
In this context, ABAC FEWG discussed in Hong Kong the issue of internationalization of emerging economies' currencies and possible recommendations we could make this year.
As endorsed in Hong Kong, ABAC will consider in Kuala Lumpur the following reports on this issue:
- Brief report on the progress of the research being undertaken by the Institute for International Monetary Affairs
- Brief remark on Renminbi internationalization by ABAC China
- Brief remark on Ruble internationalization by ABAC Russia

Proposal /Recommendations:

- ABAC will table for further discussion during ABAC III in Ho Chi Minh City the final report of the Institute for International Monetary Affairs.
- Based on further ideas contributed by economies, ABAC will prepare recommendations and action plans to promote the internationalization of emerging economies' currencies.
  e.g. ABAC recommends the following:
  - APEC should closely monitor the growing role of emerging economies' currencies in trade and investments in the region/global markets.
  - APEC should enhance the stability of financial markets/economies in the region by promoting expanded use of emerging economies' currencies, which are expected to play important roles as anchors in times of turmoil/crisis in the global financial markets and economies.
  - Economies should further strengthen and expand sub-regional cooperation such as CMIM in order to prepare for and minimize the negative impact of external shocks.

Decision Points:

- Endorse the recommendations outlined above.

Document: FEWG 32-021 Draft: **FIRST** Source: ABAC China Date: 8 May 2012 Meeting: Kuala Lumpur, Malaysia	

Document Title:

Volcker Rule Draft in the United States and Suggestions on the Financial Regulatory Reform in the Asia-Pacific Region

Purpose:
For consideration

Issue:
Financial Inclusion

Background:

In January 2010, Paul Volcker, the former Federal Reserve Chairman, the Obama Administration's Economic Recovery Advisory Board Chairman, put forward a series of recommendations, which were named as "Volcker Rule" by President Obama, for the U.S. financial regulatory reform. On July 15, 2010, the U.S. Senate passed the "Dodd-Frank Wall Street Reform and Consumer Protection Act", in which the main content of Volcker Rule is included. On October 11, 2011, the implementation of Volcker Rule draft, was approved by the U.S. Securities and Exchange Commission (SEC), the Federal Reserve and the U.S. Federal Deposit Insurance Corporation (FDIC) and was released for public comments. This draft is scheduled to be implemented on July 21, 2012. In view of the United States in the forefront of the financial sector development and its dominant position in international organizations such as IMF and the Bank for International Settlements, the new financial regulatory bills represented by Volcker Rule will be establishing a new benchmark for the global financial regulation. In this regard, the financial and banking sectors would be confronted with more stringent regulatory requirements, probably exerting profound impacts and potential risks on the financial markets and banking development in the Asia-Pacific region.

Proposal /Recommendations:

- **Regulatory conception level:** ABAC ought to promote Asia-Pacific regulators to balance between strengthening financial regulation and promoting financial innovation from two aspects
- **Regulatory principle level:** ABAC should consider promoting the emerging economies to pay close attention to the internationalization of financial regulation reform in developed economies, and reflect the views and aspirations of their own financial sectors by actively participating in the current international financial regulatory reform initiative, embodying "common but differentiated" principle of the international financial regulatory reform.

• **Regulatory co-ordination level:** ABAC should strengthen cross-border communication and coordination in terms of financial supervision among regulators in the Asia-Pacific region to ensure the effective convergence of the financial regulatory reform among economies. • **Regulatory content level:** ABAC should strengthen the regulation of volatile cross-border capital flows. • **Supporting policy level:** ABAC should strengthen the cooperation and coordination between supervision reforms and other economic policies. • **Regulatory feedback level:** ABAC should track the latest influence of regulatory reforms on economic and financial development.
Decision Points: • Endorse the recommendations outlined above.

Volcker Rule Draft in the United States and Suggestions on the Financial Regulatory Reform in the Asia-Pacific Region

ABAC China Wang Lili

I. Volcker Rule draft in the United States will be implemented in July 2012.

Since the global financial crisis in 2008, the United States, the European Union and the United Kingdom have launched a series of financial regulatory reform programs, in order to compensate for the serious deficiencies of the financial regulatory system and to promote the stability of the financial system. In January 2010, Paul Volcker, the former Federal Reserve Chairman, the Obama Administration's Economic Recovery Advisory Board Chairman, put forward a series of recommendations, which were named as "Volcker Rule" by President Obama, for the U.S. financial regulatory reform. The main outlines of Volcker Rule are as follows: Firstly, separating commercial banking business and other businesses, it prohibits commercial banks from engaging in risky proprietary trading; Secondly, it's against commercial banks' owning hedge funds and private equity funds by limiting derivatives trading; Thirdly, it imposes strict restrictions on the size of the financial institutions. On July 15, 2010, the U.S. Senate passed the "Dodd-Frank Wall Street Reform and Consumer Protection Act", in which the main content of Volcker Rule is included.

It is noteworthy that the final version of the bill has weakened the most stringent part of Volcker Rule, mainly reflected in following three aspects: First of all, different from the total ban attitude in previous version of Volcker Rule, the final Act allows banks to invest in hedge funds and private equity funds in proprietary trading, but the size of funds shall not exceed 3% of its own tier one capital. Secondly, in derivatives trading, the greatest risk derivatives trading business such as agricultural products swaps, energy swaps and metal swaps, are requested to be splited to the subsidiaries of financial institutions, but financial institutions can still retain the interest rate swaps, foreign exchange swaps and gold and silver swaps. Finally, the final Act is intended to reduce the systemic risk from bank scale expansion by raising standards in the capital, leverage ratio, liquidity and risk control, rather than adopting restrictive measures on large banks with more than $50 billion asset. On October 11, 2011, the implementation of Volcker Rule draft, was approved by the U.S. Securities and Exchange Commission (SEC), the Federal Reserve and the U.S. Federal Deposit Insurance Corporation (FDIC) and was released for public comments. This draft is scheduled to be implemented on July 21, 2012.

II. The influence of Volcker Rule draft on economy and finance of the Asia-Pacific region in the future.

In view of the United States in the forefront of the financial sector development and its dominant position in international organizations such as IMF and the Bank for International Settlements, the new financial regulatory bills represented by Volcker Rule will be establishing a new benchmark for the global financial regulation. In this regard, the financial and banking sectors would be confronted with more stringent regulatory requirements, probably exerting profound impacts and potential risks on the financial markets and banking development in the Asia-Pacific region.

1. The implementation of Volcker Rule may have great influence on the liquidity and stability of financial markets in the Asia-Pacific region

On one hand, the implementation of Volcker Rule will reduce the liquidity of financial markets. Restrictions on proprietary trading of banks in Volcker Rule, may lower the market makers role of the U.S. Banking sector in Asia-Pacific financial markets, restricting the mobility of the stock and corporate bond markets in the region. Especially under the backdrop of continuous evolution of European debt crisis, these measures would further tighten the international sovereign debt market liquidity, resulting in more difficult issuance, higher risk and greater cost of international sovereign debt.

On the other hand, the implementation of Volcker Rule will create the opportunity of "regulatory arbitrage" and increase volatility of financial markets. Compelling American banks to gradually reduce the high risky self-operated business in the next few years, Volcker Rule may push the American financial institutions to transfer their self-investment and financial innovation business to the emerging economies with the relatively loose financial supervision, and will be exacerbating the disorder of cross-border capital flows and affecting the stability of the economic and financial system in the Asia-Pacific region. In this context, the Asia-Pacific economies including China and Hong Kong, China may face the risk caused by the financial regulatory arbitrage. Due to the low tax rate, the lower cost of setting up the fund and no restriction on short selling, Hong Kong, China has become the paradise for hedge funds. Meanwhile, with the expansion of the scope of RMB cross-border trade settlement and the increasing number of RMB used overseas, it will probably enable the international capital to earn money by financial regulatory arbitrage in China and Hong Kong, China, resulting in excessive cross-border capital flows and negative impacts on financial markets and asset prices in China and Hong Kong, China.

2. The implementation of Volcker Rule may hinder economic growth of the Asia-Pacific region

The implementation of Volcker Rule will affect economic growth of the Asia-Pacific region in two aspects: On one hand, tightening the liquidity crunch of the financial markets, Volcker Rule will likely restrict the capital support to the growth of real economy and lower economic growth rate of the Asia-Pacific region; On the other hand, the implementation of Volcker Rule may not only affect credit growth of U.S. by reducing the banking sector's profit, but also further constrain the growth of consumption and consumer credit through transferring the cost of financial regulation to consumers, and finally increase the difficulty of the sustainable economic recovery of the United States. What's more, as the largest export market of the emerging economies in the region, the slowdown of American economic recovery will further increase the uncertainty of exports and economic growth of the export-oriented economies.

3. Mergers and acquisitions of financial institutions in Asia-Pacific economies would suffer negative impact of Volcker Rule

Commonly targeting for all operating financial institutions in the United States, Volcker Rule would directly affect the operation of financial institutions from Asia-Pacific economies. Currently, five banks, including Industrial and Commercial Bank of China, have established operating agencies in the United States, which will be facing the challenge of local financial regulatory policy changes with branches from other Asia-Pacific economies: the banks' proprietary trading and financial services will experience more stringent information disclosure and transparency requirements; furthermore, the process of the integrated operation and obtaining the whole license will be hampered to a certain extent by the strengthening regulatory trends. In addition, with U.S. financial regulatory policies greatly adjusted, the strategic positioning, path selection and development strategy of banks from the Asia-Pacific emerging economies will also be influenced by varying degrees. As for the targeting market, mergers and acquisitions of financial institutions in Asia-Pacific economies would suffer negative impact of Volcker Rule indirectly.

4. Financial regulatory reform in United States may affect the pace of financial innovation in Asia-Pacific economies

Financial sectors in Asia-Pacific emerging economies initiated innovation later than developed ones, and they ought to actively promote its rapid development by enhancing financial innovation under the premise of risk management. But given its huge impact on global financial regulation reform, the increasingly tightening regulation on financial innovation in the United States would influence the financial regulation and thereby restrict financial innovation in Asia-Pacific emerging economies.

III. Recommendations on financial regulatory reform in the Asia-Pacific region in the future

1. Regulatory conception level: balancing between financial regulation and financial innovation

Financial innovation is an inevitable product of the market economy, and plays an important role in promoting the prosperity of financial markets. It is well recognized that the origin of the crisis is lack of effective regulation on financial innovation rather than financial innovation itself, so we cannot limit and give up innovation. In this regard, ABAC ought to promote Asia-Pacific regulators to balance between strengthening financial regulation and promoting financial innovation from two aspects: on one hand, while strengthening financial regulation, ABAC should present reasonable guidelines for financial innovation to enhance real economy growth and broaden the space of financial development. On the other hand, communication and exchange between financial regulators and the private sectors should be strengthened in Asia-Pacific economies, avoiding suppression of financial regulatory reform policy on the dynamics of financial institution's innovation in the Asia-Pacific region.

2. Regulatory principle level: reflecting "common but differentiated" principle

The current global financial regulatory reform is mainly dominated by the developed economies, ABAC should consider promoting the emerging economies to pay close attention to the internationalization of financial regulation reform in developed economies, and reflect the views and aspirations of their own financial sectors by actively participating in the current international financial regulatory reform initiative, embodying "common but differentiated" principle of the international financial regulatory reform. On one hand, the Asia-Pacific region ought to establish unified regulatory framework and principles for financial regulation; on the other hand, under the above unified regional basic regulatory framework and principles, according to different economic level and situations, each economy should make effective, flexible measures and policies aiming at guarding against and defusing financial crisis, preventing excessive convergence of regulatory policies in the international regulatory reform in the Asia-Pacific region.

3. Regulatory co-ordination level: promoting communication and coordination between the regulators of Asia-Pacific economies

From the international level, the new regulatory bills in Europe and U.S. are intended to repair the financial regulations exposed during the global financial crisis, for the purpose of forming a benign regulatory framework, but their experience and best practices is relatively limited for the reference of the Asia-Pacific region. In order to maintain the stability of the global financial markets, ABAC should strengthen cross-border communication and coordination in terms of financial supervision among regulators in the Asia-Pacific region to ensure the effective convergence of the financial regulatory reform among economies.

4. Regulatory content level: strengthening the regulation of volatile cross-border capital flows

Cross-border capital flows, especially short-term refugee capital flows from developed markets to emerging markets, have not only affected the financial stability of the latter, but also brought more financial risks to all the APEC economies. However， the current global financial regulatory reform does not solve the risks associated with volatile cross-border capital flows brought to global economy and financial system, so we propose to adopt the following initiatives. Firstly, relying on means of electronic information, statistical monitoring management system concerning cross-border capital flows should be set up; Secondly, regulators in Asia-Pacific economies should regularly evaluate their own capacity of response to the volatile cross-border capital flows; Thirdly, mechanisms of regular communication and policy coordination in terms of cross-border capital flows supervision should be established in this region; Fourthly, regulators in Asia-Pacific economies should build monitoring reporting and emergency mechanism regarding volatile cross-border capital flows; Fifthly, regulators in Asia-Pacific economies should strengthen its supervision on the capital flows of investment banking and hedge funds; sixthly, regulators in Asia-Pacific economies should formulate proposals on abnormal cross-border capital flows and timely introduce measures to curb arbitrage fund inflows.

5. Supporting policy level：strengthening the cooperation and coordination between supervision reform and other economic policies

Many terms of the new U.S. financial regulatory Act mainly focus on strengthening the micro regulation of financial institutions, but there is no effective measure defusing macroeconomic policies factors leading to financial risks. As the crisis prevention is a comprehensive systematic project, the financial regulatory reform is difficult to avoid the financial crisis broking out again. So ABAC should call on APEC economies to take measures from the following three aspects: First, each APEC economy should strengthen the cooperation and coordination between financial regulatory reform and macroeconomic policies, eliminating all the hidden dangers that could lead to financial crisis in their own economy. Second, APEC economies ought to gradually realize the unification of accounting and auditing standards in the Asia Pacific region, which would contribute to the control of cross-border capital flows and systematic risk. Furthermore, it's beneficiary to avoid arbitrage from international accounting and auditing standards and to facilitate the effective communication among different economies on global financial issues. Third, each APEC economy should strengthen the collaborative management of systemic risk and pro-cyclical economic policies, and figure out the design standards of the systemic risk information indicators. In addition, regimes of easing the pro-cyclicality of financial markets should be established and the incentive mechanisms of financial supervision ought to be reformed. Fourth, the spillover effect of macroeconomic policies in reserve currency economies should be monitored and assessed.

6. Regulatory feedback level: tracking the influence of regulatory reforms on economic and financial development

The aim of financial regulation is to promote economic and financial development, rather than just strengthening supervision. Therefore, ABAC should promote the Asia-Pacific economies to track and monitor the influence of financial regulatory reform on economic and financial development, and to strengthen exchanges with the business community and listen to its recommendations, to timely improve the measures and policies with negative impact, ensuring they don't hinder the sustainable development of economy and finance.

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Draft: **FIRST**
Source: ABAC China
Date: 8 May 2012
Meeting: Kuala Lumpur, Malaysia

Document Title: **Status Quo, Challenges and Future Direction of RMB Settlement for Cross-Border Trade**
Purpose: For consideration
Issue: Internationalization of emerging economies currencies
Background: Since RMB settlement for cross-border trade was officially launched by the Chinese government in 2009, it has progressed step by step at the policy level, and has made a lot of encouraging achievements. Although RMB settlement for cross-border trade has made great progress, yet compared with the U.S. dollar, euro and other international currencies, the "Going-Out" of RMB is still in its infancy, and three challenges are against RMB settlement for cross-border trade in future. With the gradual liberalization of policies and maturation of market, RMB settlement for cross-border trade will continue development into further depths.
Proposal /Recommendations:
Decision Points:

Status Quo, Challenges and Future Direction of

RMB Settlement for Cross-Border Trade

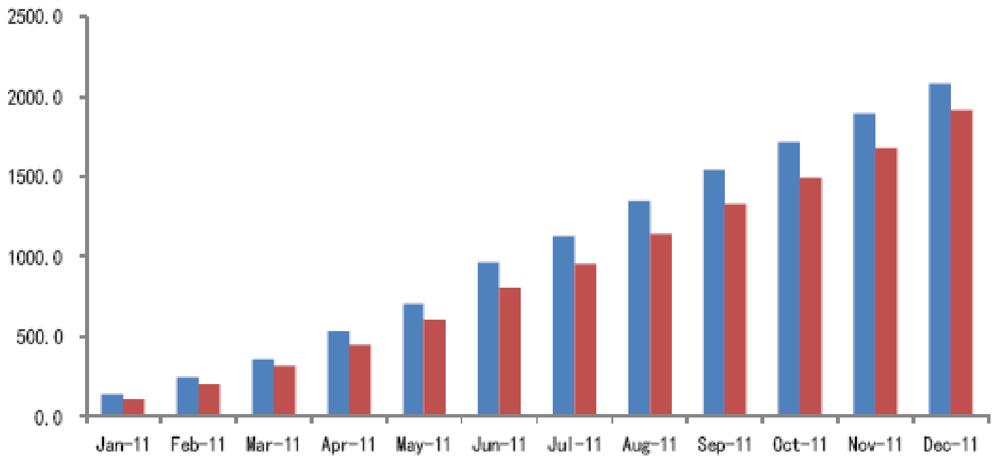
ABAC China Member　Wang Lili

I. Status quo of RMB settlement for cross-border trade

Since RMB settlement for cross-border trade was officially launched by the Chinese government in 2009, it has progressed step by step at the policy level, and has made a lot of encouraging achievements, mainly including the following eight areas:

First, the pilot project of RMB settlement for cross-border trade has progressed steadily. In July 2009, China launched the pilot project whereby cross-border trade could be settled in RMB for the trade between domestic cities of Shanghai, Guangzhou, Shenzhen, Zhuhai, Dongguan and the SARs of Hong Kong and Macau, and expanded the pilot area to the whole of China on August 22, 2011. With the extension of policies and expansion of the pilot areas, RMB settlement for cross-border trade has witnessed rapid growth: the total RMB settlement volume amounted to 3.58 billion yuan, 506.34 billion yuan and 2.08 trillion yuan in 2009, 2010 and 2011 respectively, i.e. year-on-year growth rates of 140 times and 3.11 times in 2010 and 2011.

Figure 1　Total volume of RMB settlement for cross-border trade (in billion yuan)



Blue：Total volume of RMB settlement for cross-border trade

Red：The volume of RMB settlement for cross-border trade through Hong Kong, China

Data Source: CEIC

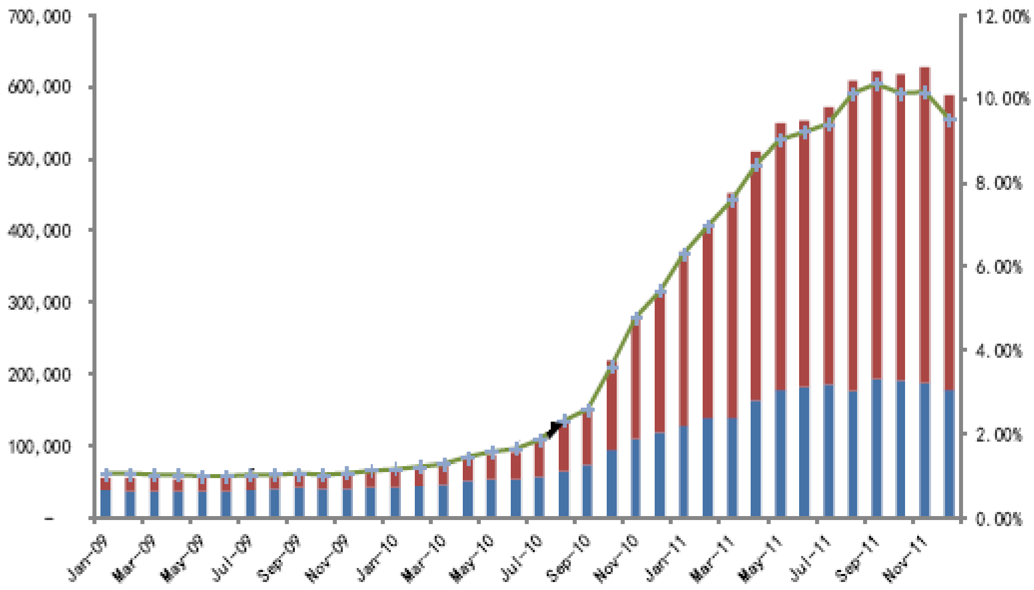
Second, the pilot project of RMB settlement for cross-border investment and financing has been conducted orderly. In order to support large-scale projects by enterprises in the "Going-Out" process, China launched a pilot project for RMB cross-border investment and financing. First, in terms of RMB cross-border investment, China adopted its first pilot project on RMB Overseas Direct Investment (ODI) in Xinjiang in October 2010, and expanded the pilot project in January 2011. Later, in terms of RMB Foreign Direct Investment (FDI), China officially launched its pilot project of RMB FDI on October 13, 2011, so foreign investors and banks can engage in RMB settlement for foreign direct investment pursuant to the policy. Finally, in terms of RMB cross-border financing, China carried out pilot projects, on a case-by-case basis, for traditional trade finance and project finance, so that domestic banks can provide RMB financing to foreign enterprises and projects.

Third, the channels for the backflow of offshore RMB funds are continuously widening. In August 2010, the People's Bank of China, China's central bank, issued *Notice on the Pilot Project and Related Matters for Three Types of Institutions including Overseas RMB Clearing Banks to Use RMB to Invest in Domestic Inter-Bank Bond Market*, opening the door for foreign institutions to enter China's inter-bank bond market, and further expanding backflow channels for offshore RMB.

Fourth, bilateral currency cooperation has been further strengthened. As of the end of 2011, China has signed bilateral currency swap agreements with central banks and monetary authorities of 14 economies including South Korea, Malaysia, Hong Kong, Belarus and Argentina, totaling 1.3 trillion yuan, which will promote bilateral trade and investment between China and these economies.

Fifth, the construction of Hong Kong as an offshore RMB center is in steady progress. First, the monetary base has gradually accumulated. By the end of 2011, the balance of RMB deposits in Hong Kong has increased from 315 billion yuan in early 2011 to 588.5 billion, up by 86.8%. Second, the RMB bond market in Hong Kong has witnessed rapid development. In 2011, RMB-denominated bonds issued in Hong Kong amounted to 107.9 billion yuan, which was nearly 2 times more than the amount of 35.8 billion in 2010. Finally, RMB loan business in Hong Kong grew steadily, where the balance of RMB loans increased from less than 2 billion yuan in early 2011 to 30.8 billion at the end of 2011.

Figure 2 Trends of RMB deposits (in million yuan)



Blue bar: RMB fix-term deposits
Red bar: RMB current deposits
Line: The percentage of RMB deposit to total deposit
Source: Hong Kong Monetary Authority

Sixth, China has established direct trading mechanisms with the world's major currencies. As of the end of April 2012, direct trading mechanisms have been set up between RMB and the world's major currencies, and nine currencies can be traded with RMB directly. This is of great significance in reducing the settlement costs for trade and investment between China and major trading partners, and in strengthening the convertibility of RMB.

Seventh, RMB has been gradually included into the reserve currencies of foreign central banks and monetary authorities. At present, central banks and monetary authorities of Malaysia and some other ASEAN economies have included RMB as an official reserve currency. In addition, Nigeria, Kenya and Thailand have started to include RMB into their foreign exchange reserves.

Eighth, the floating range of RMB exchange rate fluctuations has been further expanded. In order to promote the price discovery of RMB exchange rate, enhance two-way floating flexibility, and improve reforms of RMB exchange rate regime, the People's Bank of China announced, on April 16, 2012, to expand the floating range of RMB trading price against the U.S. dollar on domestic inter-bank spot foreign exchange market from 5‰ to 1%.

II. Challenges against RMB settlement for cross-border trade in future

Although RMB settlement for cross-border trade has made great progress, yet compared with the U.S. dollar, euro and other international currencies, the "Going-Out" of RMB is still in its infancy, and three challenges are against RMB settlement for cross-border trade in future:

First challenge: the weakening of expectation for RMB appreciation will slow down the growth of offshore RMB funds in Hong Kong. The expectation for RMB appreciation has, in large part, mandated the rapid growth of Hong Kong's offshore RMB funds. Although in the medium to long term, RMB will continue to maintain its trend of appreciation, yet given the macroeconomic uncertainties at home and abroad, it is possible that market expectations for RMB appreciation may continue to weaken in 2012, so the size of Hong Kong's offshore RMB funds may be difficult to revert to the previous rapid growth trend in the short term. This will be the biggest challenge facing RMB settlement for cross-border trade.

Second challenge: to expand the size of the offshore RMB back to maintain the stability of the domestic financial system is facing a dilemma. With the ever widening of offshore RMB and the establishment of RMB backflow mechanisms, the RMB which flowed out of China through trade settlement might come back to domestic market in the form of loans, posing challenges to the credit and monetary policies, and may result in the weakening of the central bank's window guidance. In addition, the arbitrage operations due to large RMB exchange rate and interest rate spreads between Hong Kong and the mainland may lead to large-scale abnormal transactions of funds, thus affecting the stability of financial markets in the mainland. It has become a problem in the development of RMB settlement for cross-border trade that needs to be addressed as to how to avoid strong impacts on the stability of mainland financial system while improving the investment return of offshore RMB through perfecting RMB backflow mechanisms and expanding backflow scales.

Third challenge: inadequate demand by overseas entities for RMB has limited the degree of RMB settlement for cross-border trade. First of all, the scope of actual use of RMB settlement for cross-border trade is relatively limited, where a large proportion of cross-border settlement only happened between enterprises in Hong Kong and mainland, or between mainland parent companies and Hong Kong subsidiaries, and enterprises have very strong motives for arbitrage. Yet, only increased use of RMB for trade settlement by foreign companies, especially large multinational corporations, can help promoted RMB use on a global scale in the true meaning. Second, the demand for RMB in overseas market is weak, and financing needs in mainland is still the main factor supporting the development of offshore RMB market. The establishment and improvement of backflow mechanisms can help to liaise the flow of funds between onshore and offshore markets, but in essence, RMB on the offshore market in Hong Kong is still in the "domestic circulation", and has not realized international circulation in real meaning. Overall, the fundamental improvement of the degree of RMB settlement for cross-border trade is still dependent on the further nurturing of demand for RMB by overseas entities, which will be a gradual process led by market forces.

III. Future direction of RMB settlement for cross-border trade

With the gradual liberalization of policies and maturation of market, RMB settlement for cross-border trade will continue development into further depths, mainly in the following six areas:

1. May gradually expand the use of RMB in cross-border trade and investment
Recognition of a currency by the international market is, in essence, based on confidence in the prospects for the economic development and financial system stability in its economy. Based on such international experience, China will rely on its own economic development, and gradually push forward use of RMB in cross-border trade, investment and financing in the future, throughout the perfection and opening process of its financial systems.

2. May expand the geographical scope for the use of RMB
Currently, RMB is in wide circulation and use in China's neighboring economies such as ASEAN, Central Asia, Mongolia and Russia, and over 180 economies have conducted actual receipts and payments off RMB with China, and the geographical scope of RMB use needs to be expanded further.

3. Continue to improve and open domestic and local financial markets
In the future, China will gradually improve the hierarchy and systems of domestic financial markets, improve and enrich categories of RMB products, expand market size, and establish a stable and secure operating mechanism. In addition, China will gradually open up domestic market, allowing two-way flow of RMB between onshore and offshore markets, and fully absorb the flow of overseas RMB funds.

4. Continue to strengthen the cultivation of offshore RMB market in Hong Kong
In future, China will continue to strengthen the cultivation of offshore RMB market in Hong Kong, and on this basis, Hong Kong can play its role of aggregation and radiation. These are mainly reflected in the following three aspects. First, China will continue to strengthen the construction of clearing and settlement mechanisms, and to expand the global settlement network, and to leverage on the radiation role of Hong Kong's offshore RMB market. Second, China will promote all-round development of offshore RMB financial markets in a broad sense, including credit market, foreign exchange market, bond market and stock market, and promote financial innovation. Third, China will promote the introduction of offshore RMB business, and raise more overseas awareness for offshore RMB financial platform in Hong Kong.

5. Steadily push forward opening of the capital account

Among the 40 items under the capital account offered by the IMF, China has had more than two-thirds of the items now fully or partly opened; the rest of the items, including direct cross-border securities investment, derivatives trading, short-term debts, are still subject to more controls such as limited pilot project, scale control, and even complete limitation. In the process of steadily promoting RMB settlement for cross-border trade, China will steadily relax control under the capital account, the opening of the capital account will be closely integrated with RMB settlement for cross-border trade, and diversified two-way flow channels for cross-border RMB will be gradually established, promoting virtuous circle of cross-border RMB funds.

6. Continue to promote the interest rate liberalization and formation mechanism of RMB exchange rate

Efficient and deepened financial markets are needed for RMB settlement for cross-border trade as carriers; not only onshore RMB market needs to be quite mature and open, but also offshore RMB market must be sufficiently wide and deep, together with smooth channels for two-way flows of RMB between domestic and foreign markets. Therefore, China needs to continue steadily promoting interest rate liberalization and the reforms of formation mechanism of RMB exchange rate, so that these reforms can promote constant development of RMB settlement for cross-border trade.

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Draft: **FIRST**
Source: ABAC China
Date: 8 May 2012
Meeting: Kuala Lumpur, Malaysia

Document Title:

The Influence of U.S. FATCA and the Recommendations

Purpose:
For consideration

Issue:
Financial Inclusion

Background:

In the name of fighting against tax evasion of U.S. citizens by overseas accounts, U.S. administration promulgated *Foreign Account Tax Compliance Act* (FATCA) on Mar. 18, 2010, which requires foreign financial institutions (FFIs) and other related entities to sign agreements with U.S. administration and fulfill a series of obligations centering on the tax payment of U.S. accounts, such as documentation collection, information reporting and tax withholding. The Act will come into force on Jan. 1, 2013. FFIs must sign agreements with U.S. administration before Jul.1, 2013 and will begin to report information to the Internal Revenue Service (IRS) since 2014. As a US-centric statute, FATCA aims to protect the interest of the U.S., which imposes extensive obligations upon FFIs, such as identifying information cross-boarder, reporting information and withholding tax, and will result in a serious impact on financial institutions from other economies.

Proposal /Recommendations:

- We suggest that U.S. administration should improve its tax compliance system, enhance education on taxpayers, and commence multilateral negotiations with other economies under the premise of respect of sovereignty to obtain helps from other economies and fight against the tax evasion of U.S. citizens by overseas accounts.
- We suggest that ABAC members pro-actively report the impact of the implementation of FATCA on FFIs to the regulatory agencies of their economies, especially the high cost faced by FFIs and potential huge fines for non-compliance with the Act. It is necessary for ABAC members to promote their administrations to carry out further dialogue with U.S. administration to minimize the adverse effects of the Act on the development of financial institutions of the economies.
- We recommend that the economies carry out extensive consultations and reach further consensus on FATCA. The economies should puts forward common suggestions for FATCA, urge U.S. administration to amend the Act to comply

with the common interests of global economies and avoid the severe impact of the implementation of FATCA on the normal operation of financial institutions.

- An appropriate policy coordination mechanism should be established in APEC region to avoid the situation that the formulation and implementation of unilateral policies may have negative effects on other economies, resulting in disputes in economic and trade exchanges.

Decision Points:

- Endorse the recommendations outlined above.

The Influence of U.S. FATCA and the Recommendations

ABAC China Wang Lili

I. The Background of the Promulgation of Foreign Account Tax Compliance Act

In the name of fighting against tax evasion of U.S. citizens by overseas accounts, U.S. administration promulgated Foreign Account Tax Compliance Act (FATCA) on Mar 18, 2010, which requires foreign financial institutions (FFIs) and other related entities to sign agreements with U.S. administration and fulfill a series of obligations centering on the tax payment of U.S. accounts, such as documentation collection, information reporting and tax withholding. Since then, the U.S. administration has issued several Supplemental Notices for the Act, and Regulations Relating to Information Reporting by Foreign Financial Institutions and Withholding on Certain Payments to Foreign Financial Institutions and Other Foreign Entities, promulgated in Feb, 2012, is the latest edition. The Act will come into force on Jan 1, 2013. FFIs must sign agreements with U.S. administration before Jul 1, 2013 and will begin to report information to the Internal Revenue Service (IRS) since 2014.

II. The Main Content of FATCA

A. The Scope of Application

The term of "foreign financial institutions" that should participate in FATCA means any foreign entity that: (a) accepts deposits in the ordinary course of a banking or similar business, (b) as a substantial portion of its business, holds financial assets for the account of others, (c) is engaged (or holding itself out as being engaged) primarily in the business of investing, reinvesting, or trading in securities, partnership interests, commodities , or any interest (including a futures or forward contract or option) in such securities, partnership interests, or commodities, or (d) is engaged in insurance business with certain cash value insurance contracts.

B. Information to Be Reported

According to the latest Supplemental Notice, the participating FFIs will be required to report the following information of individual accounts that had a balance or value of more than $50,000, or entity accounts that had a balance or value of more than $250,000: (a)the name, address, U.S. TIN, the account number and account balance with respect to U.S. accounts; (b)information on income associated with U.S. accounts; (c)others, including information on the gross proceeds from broker transactions. Report on the first kind of information will begin in 2014 and 2015 (with respect to calendar years 2013 and 2014); report on the second kind of information will begin in 2016; and report on the third kind of information will begin in 2017.

C. Punitive Measures

Any withholdable payment to a foreign financial institution which does not meet the requirements of FATCA, will be deducted and withholded a tax equal to 30 percent of the amount of such payment. The term "withholdable payment" means any payment of direct revenues， such as interest and dividends, as well as indirect revenues like passthru payments, if such payment is from sources within the U.S.. It is noteworthy that the scope of passthru payments will be expanded beyond withholdable payments and FFIs will be required to withhold on such payments pursuant to and in accordance with future guidance. Furthermore, FFIs will be required to close such account that the holder refuses to provide information mentioned above.

III. The Major Influence of FATCA

As a US-centric statute, FATCA aims to protect the interest of the U.S., which imposes extensive obligations upon FFIs, such as identifying information cross-boarder, reporting information and withholding tax, and will result in a serious impact on financial institutions from global economies.

First, to meet the requirements of FATCA, FFIs have to re-design their business procedures to identify and confirm pre-existing and potential U.S. accounts, to confirm whether their counterparts are participating FFIs, certified deemed-compliant ones or non-participating ones, and to confirm whether their counterparts are certain entities that are treated as exempt recipients. Second, FFIs have to collect documentary evidence about the qualification of the holders of U.S. accounts in exemption from withholding income tax or the new Act. If the holder of a U.S. account or a counterpart refuses to provide required information, FFIs have to close such account or establish other business relationship, and to fulfill the obligation to withhold a tax equal to 30 percent of the income. Third, to comply with the requirements of FATCA, FFIs will face high costs resulting from re-processing, system upgrades, staff training and customer communications, which will increase operating costs substantially and pose serious challenges to business operation. Moreover, some requirements proposed by FATCA, such as reporting information and closing non-compliant accounts, may conflict to the business information and customer information privacy regulations and industry standards in some economies, so the FFIs complying with FATCA may also face serious legal risks.

Since the promulgation of FATCA, Council of Europe and the European Commission have clearly expressed their concerns about the dilemma that the compliant FFIs have to bear high cost and non-compliant FFIs may face heavy fines. The regulatory agencies in Hong Kong SAR, Singapore, etc., also pay high attention to the potential impact on financial markets resulting from FATCA. However, it is noteworthy that, the U.S. has issued a joint statement with the United Kingdom, Germany, France, Spain and Italy that the U.S. will obtain information reports submitted by FFIs through the tax departments of the five economies mentioned above.

IV. Recommendations

First, we suggest that U.S. administration should improve its tax compliance system, enhance education on taxpayers, and commence multilateral negotiations with other economies under the premise of respect of sovereignty to obtain helps from other economies and fight against the tax evasion of U.S. citizens by overseas accounts.

Second, we recommend that ABAC members pro-actively report the impact of the implementation of FATCA on FFIs to the regulatory agencies of their economies, especially the high cost faced by FFIs and potential huge fines for non-compliance with the Act. It is necessary for ABAC members to promote their administrations to carry out further dialogue with U.S. administration to minimize the adverse effects of the Act on the development of financial institutions of the economies.

Third, we recommend that the economies carry out extensive consultations and reach further consensus on FATCA. The economies should puts forward common suggestions for FATCA, urge U.S. administration to amend the Act to comply with the common interests of global economies and avoid the severe impact of the implementation of FATCA on the normal operation of financial institutions.

Fourth, an appropriate policy coordination mechanism should be established in APEC region to avoid the situation that the formulation and implementation of unilateral policies may have negative effects on other economies, resulting in disputes in economic and trade exchanges.